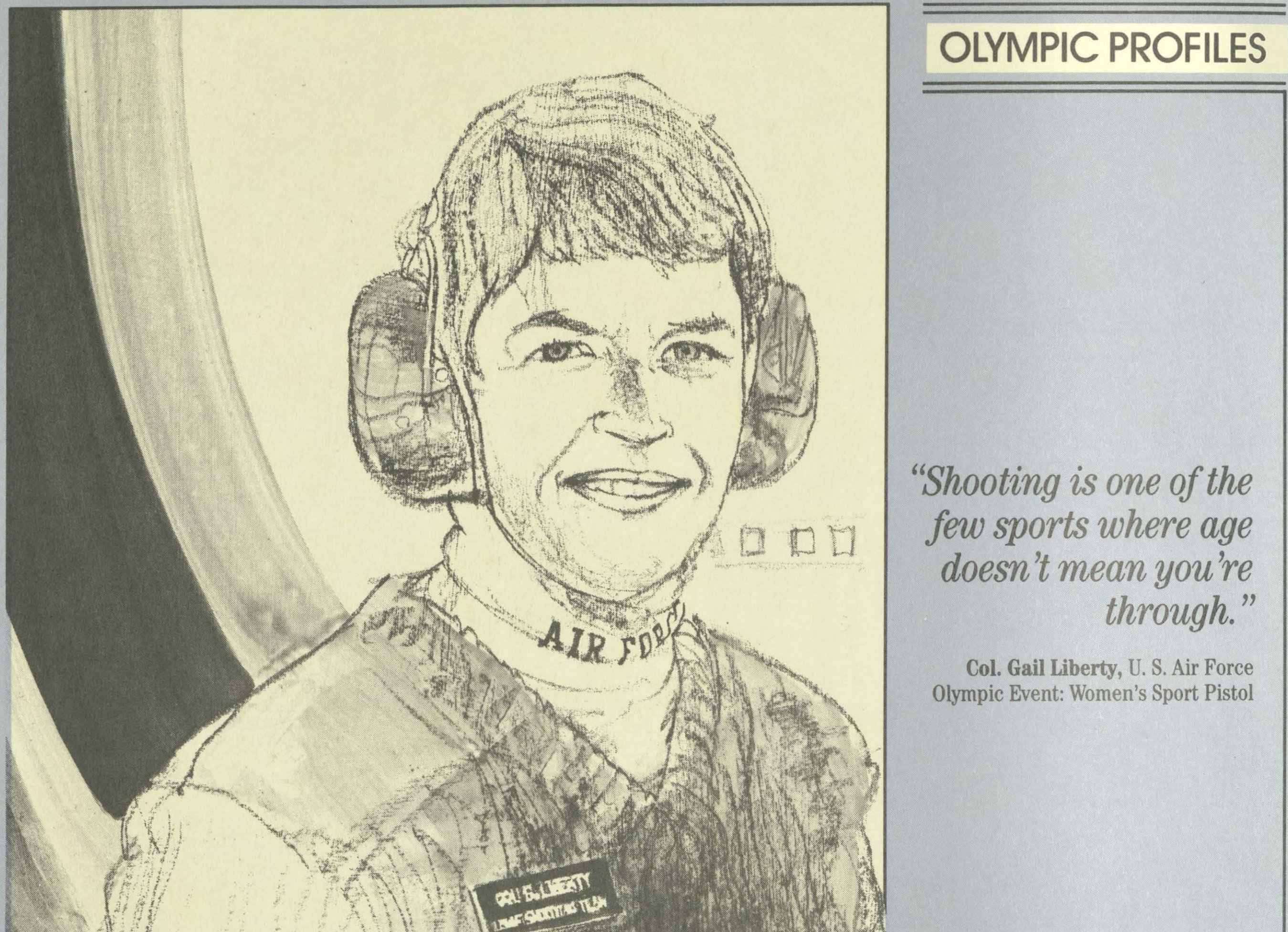
FLORIDA WILDLIFE

July-August 1984

OLYMPIC PROFILES



"Shooting is one of the few sports where age doesn't mean you're through."

Col. Gail Liberty, U. S. Air Force
Olympic Event: Women's Sport Pistol

The comeback trail is never an easy one, particularly when it involves world class competition. Imagine then the remarkable success of Gail Liberty: After a 15-year absence from competitive shooting, she has once again achieved championship status in her sport.

Gail Liberty began shooting in her early 20s and quickly reached the top, winning the national titles in Women's Pistol Shooting in both 1963 and 1964. Wishing to devote her full energies to her career as a nurse practitioner in the U. S. Air Force, she retired from shooting in 1966. It was an interest in a new Olympic event for 1984, Women's Olympic Sport Pistol Competition, that prompted a return to her sport in 1981. The following year, she re-entered competition at the age of 43 and has since won numerous titles, including the 1983 National Women's Sport Pistol Championship.

A strong believer in mental and physical conditioning, Gail Liberty is proof that dedication and desire, not age, are the hallmarks of success in the shooting sports.

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FLORIDA WILDLIFE (ISSN 0015-4369) is published bimonthly by the Florida Game and Fresh Water Fish Commission, Farris Bryant Building, Tallahassee, FL 32301. Single copy price-$1.25, including state sales tax. Subscription rates, 1 year, $7.00; 3 years, $20.00. The Commission assumes no responsibility for unsolicited, lost or damaged manuscripts and illustrative materials. Request for permission to reprint illustrations or text should be addressed to: Editor, FLORIDA WILDLIFE. Second class postage paid at Tallahassee, Florida. Post Office Publication Number 202440.

HOW TO SUBMIT

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FLORIDA WILDLIFE

Dedicated to the appreciation and enjoyment of our wildlife heritage, and to a fuller understanding of efforts directed toward the protection, restoration, enhancement and wise use of our natural resources.

Volume 38, Number 2 July-August 1984

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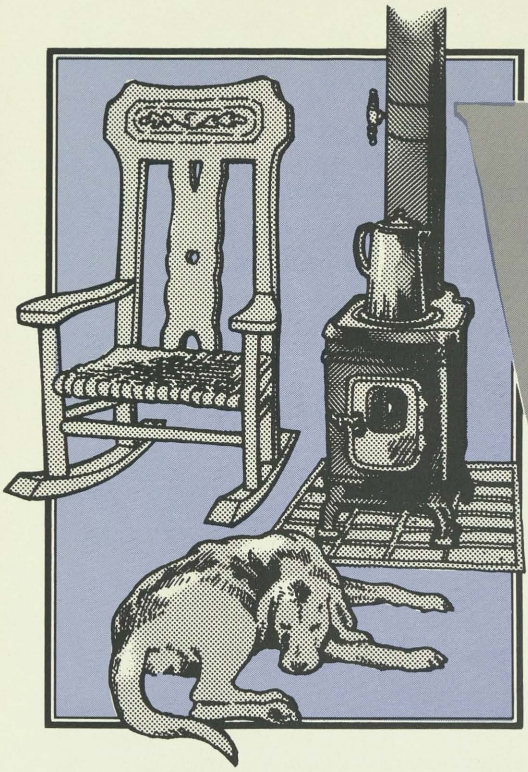
THE COVER

Our cover is a scratchboard rendition of a Florida panther by award-winning Tampa artist Gregg Murray. This original work was completed especially for FLORIDA WILDLIFE, and a limited edition of fine lithographic prints are available to our readers. See details on page 47.



WOOD SMOKE

Point Well Taken

By Biff Lampton

There's all kinds of hunting; bird hunting and deer hunting, rabbit hunting and duck hunting. But the strangest kind I have yet discovered is arrowhead hunting.

All these years I've been under the impression there's little sport involved when "game" simply lays around, basking in the sun, ready and waiting for the hunter to come along. But following a recent arrowhead hunt, I now have a better awareness and appreciation of the sport and of those who participate in it.

Vinard Hitt is about as avid an arrowhead hunter as there is anywhere. Living out in the Florida woods, midway between Ocala and Gainesville, he's smack in the midst of some of the best arrowhead hunting territory around and he makes full use of this boon.

Vinard has a whole cigar box full of arrowheads. His office is decorated in a kind of "arrowhead modern" and his wife has problems with spring cleaning because of all the sandy footprints he leaves on the kitchen floor when he brings in a couple of new ones to wash off at the sink.

Vinard has hunted arrowheads on the hillsides, chased them through the woods and plunged into the depths of rivers in relentless pursuit of his quarry. He is also quite knowledgeable as to arrowhead types and origins, and the American Indians who made them.

He recently enticed me to his home with the offer of a home-cooked meal, but upon my arrival in the middle of a downpour, I discovered it was arrowhead hunting that was foremost on his mind.

"Wanna go arrowhead hunting?" he asked. "It's a perfect day for it."

I had always thought only duck hunters were crazy enough to go out on days like that one, but Vinard explained that arrowheads are sneaky little devils.

"They like to hide out in newly plowed fields, and they venture to the surface only for brief moments, during or shortly following a heavy rain," he told me. "The rain washes the sand away from them, leaving them perched atop a tiny column of soil, and under these conditions, the wary arrowhead is most vulnerable and exposed to the hunter," he explained with a grin.

We drove to a nearby, freshly plowed field, and between swipes of the windshield wipers, Vinard pointed to a soggy grove of oaks. "See those trees over there?," he asked. "That would've made an ideal campsite for Indians.

"Where this field is located, in relation to the oaks, is a choice spot. I'll bet a lot of arrowheads wound up buried when some Indian shot an arrow and missed his dinner."

As we got out of the truck, he outlined the accepted arrowhead hunting technique. That is to walk slowly in the muddy field, sinking up to your knees from time to time, with your eyes glued to the ground lest an arrowhead escape detection.

"But can't we wait until the rain stops?" I asked as the wet rain began to drench me. Vinard quickly vetoed that idea.

"There are thousands of arrowhead hunters around," he said, "and if we don't get out and hunt up the ones this rain is exposing, somebody else will come along and haul them off. Now, while it's raining, we'll have first crack at any arrowhead here." That sounded reasonable to me, so we headed out into the downpour together. Being much more experienced in this arrowhead hunting sport, it wasn't surprising that Vinard made the first discovery.

"Here are some chips," he called out to me, just as we entered the field. I walked over to where he was pointing to some little, undistinguished pieces of flint rock. "Where there're chips, there're bound to be arrowheads," he said cheerfully as water dripped from his chin.

I thought a chip was something you put down on the poker table when you held a royal flush, but Vinard told me about how the Indians struck larger pieces of flint to form an arrowhead, "making the chips fly" so to speak. I examined one of the chips and came to the conclusion that they truly were little undistinguished pieces of rock.

Vinard slogged off in one direction and I in another, and as is often the case, I was smitten by beginner's luck. Right there on the ground, about to be stepped upon and buried for another 5,000 years, lay a perfect arrowhead.

"Hey Vinard, I've found one," I yelled as I stooped over and grabbed it.

He came running over, which was not an easy task with 20 pounds of sticky mud clinging to each foot.

"Oh boy!" he exclaimed as he took it from my hand and wiped it clean. He looked it over very, very carefully. "Wow! It's perfect! Congratulations! What are you gonna do with it?" he asked.

Now that was a silly question. I'm as avid about bow hunting hogs as Vinard is about his arrowhead hunting. I took it from him and ran my thumb along its sharp edges.

"You know," I mused, "I've always wondered how effective these homemade broadheads really were. They must have been pretty good, or else a lot of Indians would have wound up on welfare. I think I'll tie this one onto an arrow and shoot a hog with it to see just how good they really were," I told him.

Vinard's face fell and his eyes bugged out. His chin dropped down to his chest.

"You're gonna do WHAT?" he asked excitedly. "Do you have any possible idea of what you've found? You've found a NEWNAN'S POINT! Do you know how many NEWNAN'S POINTS I have? Two! I have two NEWNAN'S POINTS and you're gonna go shoot a hog with this one? You're actually gonna go shoot a hog with this Newnan's point? Are you crazy?" He grabbed it like it was the last piece of cake on the plate.

I am happy to report that Vinard now possesses *three* Newnan's points because we negotiated a settlement. In exchange for the Newnan's point, Vinard said he would dig through his cigar box and find another one for me to tie onto an arrow and shoot a hog with, just like the Indians used to do.

But, as hog hunting season draws closer, day by day, I find it strange that he hasn't sent it yet. ☐

Mulberry Bass

By Don Ashley

Important decisions should be made under a mulberry tree. I'm not sure exactly why, but I recollect a warm and wonderful feeling, as a young boy, perched on a mulberry branch eating juicy black mulberries as fast as I could pluck them. Between those delicious bites, I looked down from my tower and ruled the world—a twisted bough for a throne, tousled hair as a crown and stained fingers as a royal seal.

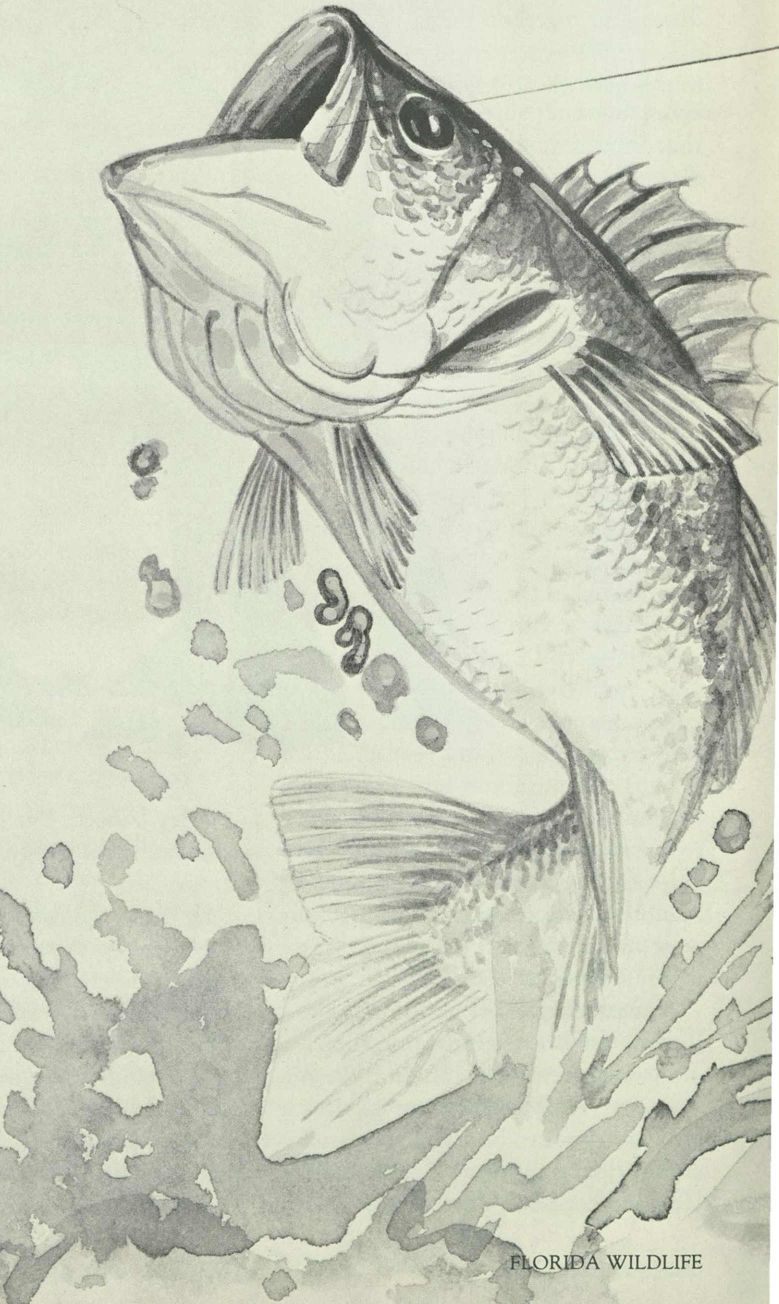
After the feast, I could, if I wanted, inspect my treasures—all of which were in a pocket; two copper pennies, a magnifying glass and a smooth pebble. Or, I could start a war by crossing my kingdom, climbing the chinaberry tree and launching a few "berry bullets" at neighboring tribes.

Most often though, I just sprawled at the base of the tree and let the warm spring sun dull my energy to move. Overhead, a mockingbird sometimes chirped, presumably as satisfied as I had been with the mulberries, and in the distance a blue jay screamed for his share. Something with wings was always buzzing and a buckeye tirelessly folded and unfolded its sails. I couldn't move. Only my mind wandered.

It pondered things big and small and decided things which at the time seemed crucial to world affairs—like where to fish later that afternoon. Would another bass be in that small opening in the cattails where I caught my very first bass?

If you're a hunter or fisherman, few recollections in life are better remembered than your first big fish, deer or trophy anything. Somehow that moment of excitement and absolute euphoria is frozen and sealed in a special corner of the brain, to be taken out, thawed, relived, cherished and then returned—unaltered, but still tingling—to be revisited yet another day.

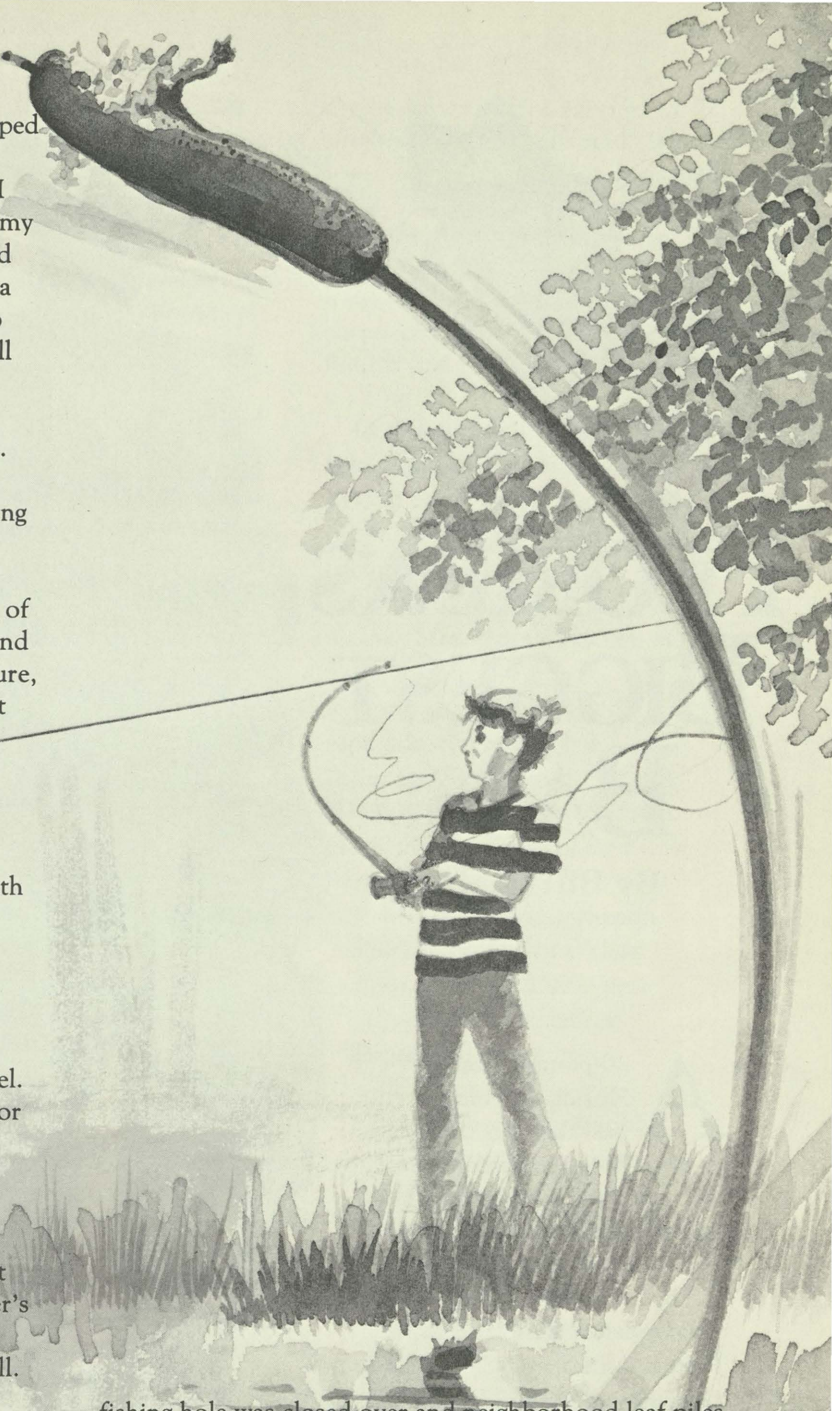
Such was my vision that day under the mulberry tree. I first imagined an absolutely terrible cast, the kind we've all made, but hate to admit. It was one with more



height than distance and a lure presentation that slapped the water like a jumping manta ray.

Even as a young, daydreaming sportsman though, I knew what to do next. Without looking up, I shook my head in disgust, banged on the reel a few times, pulled out some more line, straightened the rod eyes, made a few twists on available knobs and, with a firm nod to myself, assured anyone that might be watching that all future rod and reel misfires had been cured.

Only then could you afford an over-the-shoulder glance to see how the performance had been received. This time, I had played to an empty stage, which allowed me to skip the second act of gingerly rewinding the line through the jungle. Instead, I jerked the rod double and the worm again catapulted skyward. Halfway to shore, it nosedived once more at the edge of the opening, but this time the worm dangled half in and half out of the water. A single cattail suspended the lure, but one more impatient pop of the rod would bring it shoreward.



Another quick glance around assured that no one had joined the audience, but before I could heave back with all my muscle and might, a swirl and gulp inhaled the worm. Dumbfounded, I froze. The bass hooked itself then exploded in cartwheeling jumps. To one whose largest real individual catch had been an eight-ounce panfish, the imaginary three-pound largemouth was a giant. I was still frozen. I couldn't speak. I couldn't reel. I couldn't even move and wasn't certain of breathing or a heartbeat.

The bass tugged harder and, for the second time, lunged out of the water and wildly shook his bucket head. Instinctively, I simply started backing up. Each step brought the bass a few feet closer to shore until it slid up on the bank and flopped wildly along the water's edge. I nonchalantly dropped rod and reel and dove head first on that fish as though it were a scaly football.

When finally my inexperienced thumb gripped its lower jaw, absolute pandemonium set in. I ran all the way home grinning, shouting, strutting and exclaiming for all to see—my first largemouth bass, a three-pounder, give or take a few wide-eyed ounces. Landed without, I might add, a single turn of the reel handle after the strike.

A few weeks ago, I was back in my home town and stopped on a blustery winter day to take another look at that little pond and to relive, for an instant, that special moment from the past. But instead of a sloping shoreline, concrete fill and dirt was being used to level the southern shore of the little city lake. A sign announced the rezoning of a prime commercial location.

The northern shore hadn't fared much better, and a parking lot now stretched right to the water's edge. A rusting metal drum couldn't sink for the thick mat of hydrilla and other vegetation covering the shoreline. A few cattails were still there, but the open path to my old fishing hole was closed over and neighborhood leaf piles blocked what used to be an opening to wonder and adventure.

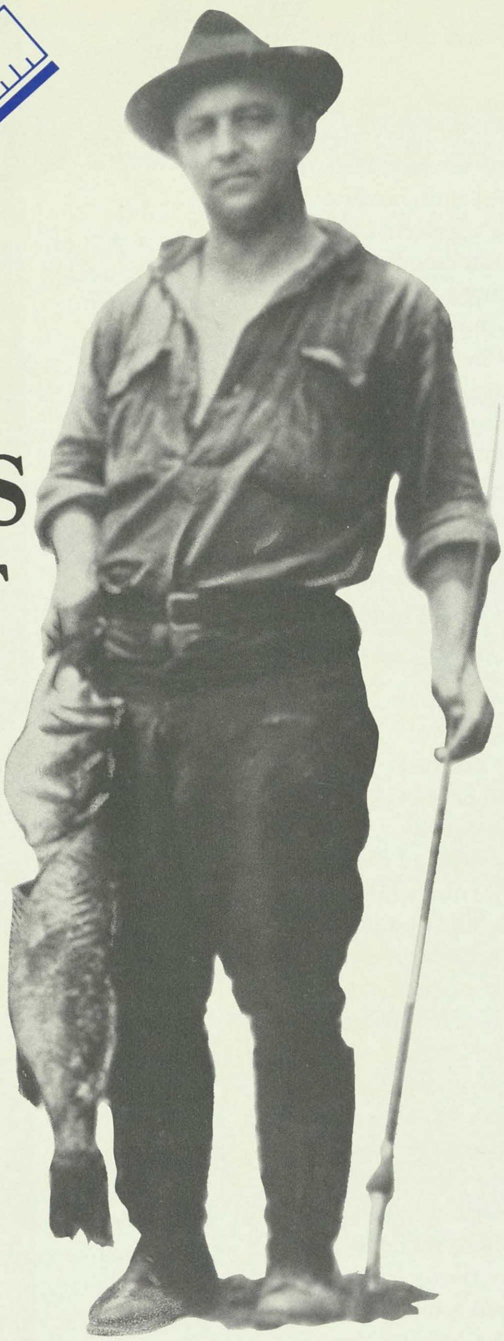
I wondered where other young boys, like my two coming up, would go today for their mulberry bass. Or, how many youngsters would simply go without a good fishing opportunity, and be robbed for the rest of their lives of a special experience and personal endearment to the outdoors and the wild things that live there.

I wondered if the young children playing across the street knew what a naturally beautiful place that small lake used to be. Then I noticed that the huge Australian pine that used to be in their yard had been cut down as well, and I wondered if my mulberry tree had also fell to the blade of progress and development.

They shouldn't clear away and pave over the mulberry trees you know. That's where important decisions should be made; like how many good places remain to fish, and what the world might be like without any mulberry bass. □

FLORIDA'S BIGGEST BASS

By Bill Baab



A 20-pound, 2-ounce Florida largemouth bass that was caught in Big Fish Lake, in Pasco County, 61 years ago has been recognized as the largest bass known to have been caught in Florida.

The big bass was caught by the late Frederick Joseph "Fritz" Friebel, on a Creek Chub Bait Co. Straight Pikie Minnow, near San Antonio in May 1923. This newly found old fish record tops the Florida record used since 1961 by more than a pound. Riley Witt of Tampa, fishing with a live eel, caught a 19-pound largemouth that year in Pinellas County's Lake Tarpon.

Friebel's bass was just 2 pounds, 2 ounces under the present world record largemouth bass, which was caught June 2, 1932, in Montgomery Lake off the Ocmulgee River in Telfair County, Georgia, by the late George Washington Perry.

In fact, Friebel's Pasco County bass was considered the national standard by *Field and Stream* magazine at that time. In a *Tampa Tribune* article on October 12, 1952, Friebel is quoted:

> It was a Sunday morning—when I should have been in church—and I had to call a grocer to open his store to get the fish weighed. It was entered in the *Field and Stream* (big fish) contest and I was declared national champion in that class.
>
> Manufacturers of fishing tackle all over the country sent me valuable prizes. I held the title until 1934 when a fellow in Alabama (sic) landed a big-mouth which weighed 22 pounds. My fish weighed 20 pounds and 2 ounces two hours after it was caught.

Friebel was mistaken about the state in which the 22-pounder was caught. Although Perry caught his fish in 1932 and immediately entered it in the magazine's contest, *Field and Stream* did not establish it as the all-time mark until a 1934 issue.

Incidentally, the store at which Friebel weighed his bass was operated by his brother, Walter, now a spry 82. "I recall the fish being weighed on a set of Toledo scales," Walter said in a recent interview.

Fritz's daughter, Mrs. Lamont (Anna Friebel) Labadie of Valrico, said, "Daddy was about 30 years of age at the time the photo was taken in San Antonio. I can truly remember all the excitement (it caused) and the fish.

"I was reminded by a friend that when Daddy weighed the bass, someone present accused him of putting lead sinkers in it. Daddy took out his pocketknife, slit the fish's belly open, and told the man to put his hand inside!"

For a while where he caught the fish was subject to conjecture. Two men accompanied him that day in 1923: his brother-in-law, Matt Klassen, and Klassen's friend, Allan Pratt. They helped hold up the massive string of bass, shown in an old photograph, that included the big one. Klassen is deceased and Pratt could not be located for comment.

The popular version of the story, as it was known in west-central Florida, is that the bass was caught in Moody Lake near San Antonio. J.M. Hulett of Frostproof is quoted in that same 1952 *Tampa Tribune* article as saying, "... I was then working for the Atlantic Coast Line Railroad at Trilby, and I did a lot of bass fishing in the lake where Mr.

Friebel caught his big bass. The lake was called Moody Lake, and was about four miles from Dade City, on property then owned by Perry Miller. I drove to Tampa and saw the big bass on display—frozen in a block of ice. I was told the fish weighed 20 pounds, 2 ounces."

But Walter Friebel insists his brother told everyone "Moody Lake" just to throw other fishermen off the track. "I believe he caught the bass in another lake, west of San Antonio. He didn't want anyone else fishing that lake!"

Fritz Friebel was a traveling salesman for Knight and Wall Hardware Co., a now defunct Tampa firm. *The Tampa Tribune* of October 5, 1952 notes:

> It (the 20-pounder) was such a fine specimen that it was frozen in a big block of ice and kept on exhibition in a show window in the Roberts Building opposite the post office for several days.

As Anna Labadie recalls, the bass was thawed from its icy repository and taken back to San Antonio, "where we ate it instead of having it mounted."

John Lukens, an accounts executive with the old Creek Chub Bait Co., in Garrett, Indiana, recalls his firm doing extensive research on both the Perry and Friebel basses.

"We were pretty careful about it all because we wanted to promote the lures in our advertising," Lukens said. "Perry caught his bass on a perch scale Wigglefish, while that Friebel fellow caught his on a 700-W Straight Pikie Minnow."

Lukens' recollection was confirmed by 75-year-old Harry Heinzerling of Garrett, a son of one of Creek Chub's co-founders, during a recent telephone conversation.

Existing photographs of Fritz Friebel are few in number and, with one exception, show him wearing the most disreputable clothes possible.

"Daddy didn't own a boat," his daughter explained. "He wore the worst-looking clothes because he often waded into water up to his armpits."

Friebel was a Brooklyn, New York native who came to Florida in 1904, according to a family history now being written by Walter Friebel. They sailed in a ship owned by the Clyde Steamship Lines, traveling in steerage, the cheapest passenger section of the ship, near the rudder. Even then, young Fritz showed a propensity for big fish.

"Just aft of the steerage was all kinds of machinery," Walter relates. "Mother had Fritz dressed up in a nice sailor suit with blue stripes on the collar and trim, so he thought he was the engineer and crawled all over the winch. The winch's cables and gears were covered with grease, which made his sailor suit look bad.

"He stuck his head out one of the portholes and could not get it back in again. Mother said that it took her two hours to get his head turned the right way so he could get it back in again. He said he had seen some big fish and had stuck his head out to see them better."

The Friebels—the mother and seven children—arrived in Jacksonville after three days and two nights on the ocean. After that, they took a 200 mile freight train ride (they all were crammed into the caboose) to San Antonio.

Fritz Friebel joined Knight and Wall in the Ford Model T days. "Daddy was in sales for years," his daughter recalls, "and then served as sales manager for many more. In his early years as a salesman, he covered the central part of the west side of Florida, traveling first in a Model T Ford, later in a Model A. It took him from Monday morning until Friday night to cover his territory.

"He carried his fishing gear along and fished whenever he got a chance. Many of his customers owned lakes and they would invite him to fish them. He carried a gun during hunting season.

"Daddy loved and excelled in many sports." Labadie said. "He was 5 feet 8 inches tall and weighed about 160 pounds in his prime. He was offered the shortstop's position by the Cincinnati Reds, but turned it down. He was a good tennis player and golfer and loved boxing, but his first love was fishing and hunting."

In addition to his brother and Mrs. Labadie, Fritz Friebel, who died in 1965, is survived by two other daughters, Mrs. Fredericka Chance of Miami and Mrs. Virginia Fry of Griswold, Iowa, and by his widow, Mrs. Dannie Friebel, of Tallahassee.

Florida has always had the reputation of being a bass fisherman's paradise. In Dr. J.A. Henshall's 19th Century account of Florida fishing, *Book of the Black Bass*, he wrote:

> Mr. H.W. Ross, when in Florida, caught, in a 'clear, deep, lily-bound lake' near Altoona, in that state, a largemouth black bass which, he stated, weighed 23 and one-eighth pounds, and measured, from tip of nose to tip of tail, 37 and one-half inches, and in girth, 29 and one-half inches.

Henshall goes on to say that "I have taken the largemouth bass in Florida up to 14 pounds on the artificial fly, and as heavy as 20 pounds on bait." ☐

EDITOR'S NOTE: When the present official records for Florida freshwater fish catches were first assembled in June 1976, Friebel's bass had not been reported to the Commission. The 1926 edition of the *World Almanac and Book of Facts*, however, listed the 1923 record catch. The record also appeared in early issues of *Field and Stream*. Extensive study of the evidence supporting Friebel's catch by Commission personnel supports the authenticity of these early reports.

FOR THE RECORD

Florida's Official Record Freshwater Fish Program

By Trisha Spillan

Breathes there an angler who can honestly say that somewhere in the back of his mind, he hasn't harbored visions of catching a record fish? You know, the fish of which dreams are made; the big one that didn't get away.

Every strike an angler gets could be a record—especially in Florida, where hundreds of miles of rivers and streams and thousands of acres of lakes are available for freshwater fishing. And with the Game and Fresh Water Fish Commission's program of improving the state's fisheries, there are potential record fish in uncountable spots.

In 1976, the Commission began a long-awaited program to officially recognize record fish caught in Florida. The original 21 listed species has now grown to 24, and records have been established for 20. For the remaining four, minimum weights have been set but no state catches have been certified.

In May 1984, a new state record redbreasted sunfish (*Lepomis auritus*) was caught in the Suwannee River in Dixie County. The large redbreast was caught by Alvin Buchannan of Old Town, and it weighed 1 pound, 12.8 ounces. The total length of this new top weight record was 12 1/8 inches and the healthy fish had a hefty girth of 13 9/16 inches.

Another recently documented record fish was landed May 12 of this year in the Suwannee River in Columbia County. Coy Dotson of Jasper brought in a 13.3-ounce spotted sunfish (stumpknocker) (*Lepomis punctatus*) while using a white with red dot Beetle Spin. The stumpknocker measured 8.15 inches in length with a girth of 10 inches. It is the first stumpknocker to be certified onto the official Florida records.

Just as this issue was going to press, a new Florida record sunshine bass was landed by Horace Lee Price Jr. of Marianna. His 15 pound, 8 ounce catch was made on a homemade spinner bait. The fish was caught below Jim Woodruff Dam on the Apalachicola River about 10 o'clock at night on June 14.

Shawn James Williams of Alva brought in a 16 pound, 12 ounce new Florida record white catfish (*Ictalurus catus*) while fishing with beef liver for bait in the Caloosahatchee River in Lee County. He caught his big catfish in April.

Still without an official record catch are four species. The fish and their minimum qualifying weights are: American shad (*Alosa sapidissima*)—three pounds; redfin pickerel (*Esox americanus*)—12 ounces; Florida gar (*Lepisosteus platyrhincus*)—10 pounds; and alligator gar (*Atractosteus spatula*)—70 pounds.

To qualify for Florida's official fish records, catches after 1976 must meet these guidelines to be certified. Any fish not actually weighed and inspected is not certified:

1. Any fish to be considered for Florida record status must have been legally taken in Florida fresh waters.

2. Formal application is required for recognition of any fish as a state record. The application must also carry the certification of a Florida Game and Fresh Water Fish Commission fisheries biologist, regional manager or other qualified Commission employee, stating that he personally identified, measured and weighed the fish. Actual weights must be determined on a scale certified accurate by the Florida Department of Agriculture and Consumer Services.

3. Only an unfrozen carcass is acceptable for weighing certification. If circumstances make it necessary to freeze the fish before it is presented to the Commission's certifying authority, it must be thawed for weighing, measuring and detailed examination to verify it has not been altered in any manner.

4. Proof must be established beyond a reasonable doubt that the fish was taken by legal sport fishing methods. A notarized statement by the applicant to that effect is a part of the formal application for recognition of the catch. Names and addresses of witnesses, if any, must also be listed.

In the event the fish appears to be a possible Florida record, a panel of biologists may be appointed by the chief of the Bureau of Fisheries Management to consider all aspects of the application. A majority opinion will be final regarding the acceptance of the fish as a Florida record.

The Commission reserves the right to photograph the fish and to retain such photos for its exclusive use, unless otherwise arranged in writing through the editor of FLORIDA WILDLIFE (magazine). This in no way implies any restriction on the right of the fisherman to photograph or have the fish photographed for whatever purposes he sees fit.

Application forms are available through the Commission's regional fishery biologists and through other Commission personnel. Telephone numbers and addresses are listed on page 48. □

FLORIDA'S RECORD FISH CATCHES

SPECIES		WEIGHT POUNDS—OUNCES	ANGLER AND WHERE CAUGHT
largemouth bass *Micropterus salmoides*		20—2	Frederick Joseph "Fritz" Friebel, Big Fish Lake, a private pond in Pasco County, May 1923.
redeye bass *Micropterus coosae*	CERTIFIED	3—7	J.T. Reynolds, Apalachicola River, Gadsden County, June 1982
spotted bass *Micropterus punctulatus*	CERTIFIED	3—7	Ronald Bundy, Apalachicola River, Gadsden County, August 1981
striped bass *Morone saxatilis*	CERTIFIED	38—9	Justin McAlpin, Lake Seminole, Gadsden County, November 1979
sunshine bass (A hybrid between the white bass and the striped bass)	CERTIFIED	15—8	Horace Lee Price Jr., Apalachicola River, Gadsden County, June 14, 1984
Suwannee bass *Micropterus notius*		3—8	J.G. Cannon, Ochlockonee River, Gadsden County, May 1974
white bass *Morone chrysops*	CERTIFIED	4—11	Richard S. Davis, Apalachicola River, Gadsden County, April 1982
black crappie (speckled perch) *Pomoxis nigromaculatus*		3—12	John McGilvray, Newnans Lake, Alachua County, December 1964.
bluegill *Lepomis macrochirus*	CERTIFIED	2—12	Don V. Flannery, private pond in Hillsborough County, April 1978
flier *Centrarchus macropterus*	CERTIFIED	1—0	Butch Taylor, private pond in Leon County, April 1981
redbreasted sunfish *Lepomis auritus*	CERTIFIED	1—12.8	Alvin Buchannan, Suwannee River, Dixie County, May 1984
redear sunfish (shellcracker) *Lepomis microlophus*	CERTIFIED	4—2	Larry Gates, Merritt's Mill Pond, Jackson County, April 1982
spotted sunfish (stumpknocker) *Lepomis punctatus*	CERTIFIED	13.3 ounces	Coy Dotson, Suwannee River, Columbia County, May 1984
warmouth sunfish (warmouth perch) *Lepomis gulosus*	CERTIFIED	1—9	Bill Rasmussen Jr., Roberts Pond, Okaloosa County (Eglin Air Force Base) May 7, 1981
channel catfish *Ictalurus punctatus*	CERTIFIED	42—3	Mike Davis, Haines Creek, Lake County, April 1980
white catfish *Ictalurus catus*	CERTIFIED	16—12	Shawn James Williams, Caloosahatchee River, Lee County, April 1984
chain pickerel *Esox niger*		8—0	Jimmy James, Lake Talquin, Gadsden County, July 1971
bowfin (mudfish) *Amia calva*		17—3	Wilbur Glover, Lake Tohopekaliga, Osceola County, 1971
carp *Cyprinus carpio*	CERTIFIED	40—9	Bernard L. Rowan, Apalachicola River, Gadsden County, May 1981
longnose gar *Lepisosteus osseus*	CERTIFIED	32.3 pounds	Evan D. Merritt, Lake Panasoffkee, Sumter County, July 1981

The following species have not yet had a catch reported that is a state record. The weights shown are minimum weights to qualify for a Florida record:

redfin pickerel *Esox americanus*	12 ounces
American shad *Alosa sapidissima*	3 pounds
alligator gar *Atractosteus spatula*	70 pounds
Florida gar *Lepisosteus platyrhincus*	10 pounds

From Borrow Pits To Bream Ponds

By Larry Martin

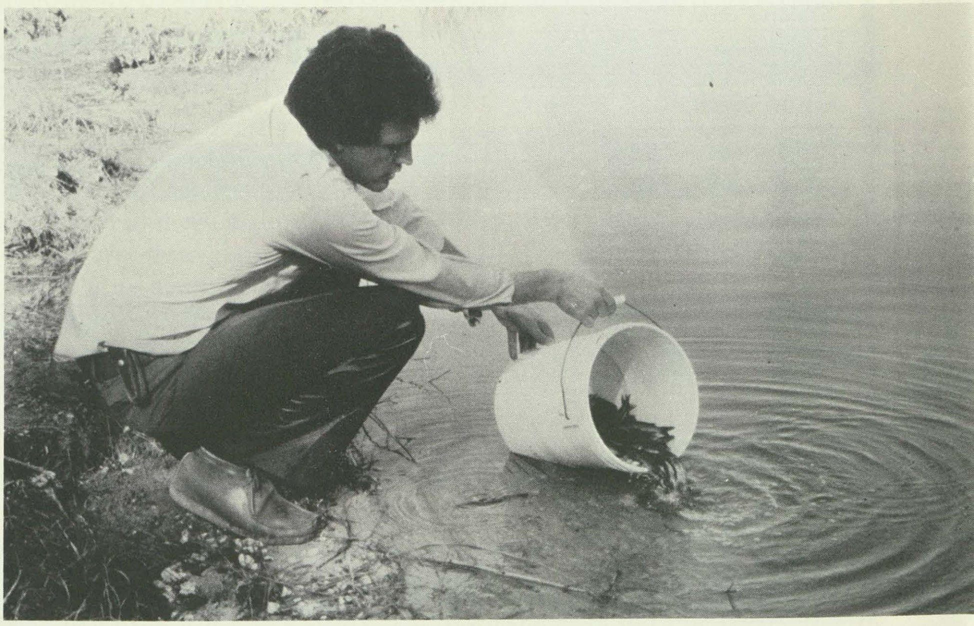
The early morning mist was rising off the water and the ground was covered with heavy dew as the angler walked gently down the shoreline, then cast to the edge of a willow bush protruding from the bank. As the balsa plug settled on the pond, a series of circular ripples moved away from the lure, disrupting the slick surface. The lure bobbed once, then disappeared in a small geyser of spray.

The scene is anything but what an angler might expect to find in the midst of the thriving City of Jacksonville with its estimated population of 579,100. But in the spring of 1976, the Game and Fresh Water Fish Commission started an urban pond program there. Until that time, Duval County anglers had unlimited saltwater fishing, but very little freshwater fishing opportunity, especially for those who did not have a boat or access to a private pond.

Commission personnel, through a cooperative effort with the Recreation Department of the City of Jacksonville, developed eight ponds which have been intensively managed for bank fishing. An annual budget of $2,500 was approved for this project by the city council, as well as an agreement for the city to provide trash pickup and maintenance of entrance roads. The Commission agreed to manage the ponds for quality bank fishing and maintain a good fish population in each of the fish management areas.

The majority of the ponds are borrow pits; large, water-filled holes in the ground left over from highway construction projects. These ponds range in size from four acres to 40 acres and some have depths up to 20 feet.

Once the ponds had been strategically selected throughout Duval County, the Commission developed an individual management plan for each. Basic fisheries

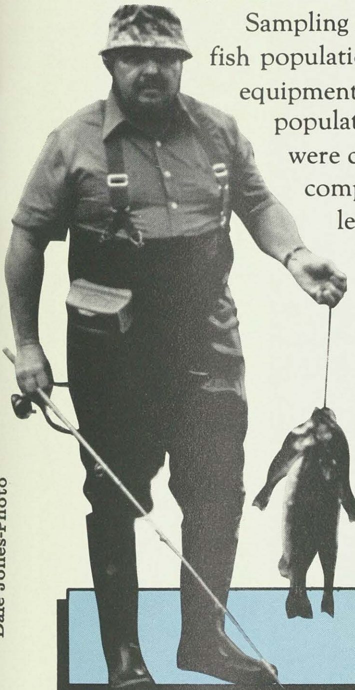


Jerry Krummrich-Photo

The Commission determined fish populations in each of eight ponds, then stocked them with the best balance of bass and bream. Catfish were also stocked in some.

management questions such as these first had to be answered:

- What type of fish population is there now?
- Does the pond need lime and/or fertilizer?
- How much lime or fertilizer is needed?
- Is supplemental fish stocking appropriate?
- Would sunshine bass or catfish stocking be beneficial?



Dale Jones-Photo

Sampling methods for each pond's existing fish population included use of electroshocking equipment, seines and gill nets. After population sampling, water quality data were collected and initial plans were completed. In most cases, it took at least two years of management to get the ponds ready to open for public fishing.

The Commission has special regulations for each area which play a key role in fish management. There is a minimum 16-inch size limit for black bass in all ponds. A daily bag limit of 10 sunshine bass is allowed, with no minimum size limit. Both these bass species help maintain predator pressure on bream and help keep bream populations in check.

On some ponds, there are additional restrictions, such as *no swimming, alcoholic beverages or firearms permitted*. Use of boats with gasoline motors is also prohibited on some ponds. Lee Adams is one of these.

Several fish attractors were placed in the ponds to provide additional fish cover. Most were made of brush piles, anchored to the bottom with concrete blocks, and were placed close to the bank for the convenience of anglers.

There is an annual inspection of each pond to determine if the Commission's management plans need to be altered. Pope Duval East Pond, for instance, had to be temporarily closed in November 1981. The fish population did not have a good sport fish balance and, to improve fishing, they were removed with the chemical rotenone. Next, the pond was fertilized, limed and restocked with the proper ratio of bass and bream. It opened again to fishing last May.

A 1982 creel survey showed 14,000 angler hours had been spent fishing these small ponds. Catches were excellent! □

Eight Public Fishing Ponds in Jacksonville

Hanna Park (40 acres)	borrow pit, natural sandy bottom, fertile	largemouth bass, redear sunfish, sunshine bass, brown bullhead, striped mullet, bluegill, channel catfish
Oceanway (10 acres)	borrow pit, sandy bottom, fertile	channel catfish, largemouth bass, bluegill, sunshine bass
Lee Adams (11 acres)	borrow pit, sandy bottom, fertile	largemouth bass, redear sunfish, channel catfish, bluegill, sunshine bass
Pope Duval East (13 acres)	natural sandy bottom	largemouth bass, channel catfish, redear sunfish, bluegill
Pope Duval West (10 acres)	natural sandy bottom, fertile	largemouth bass, channel catfish, redear sunfish, bluegill
St. Augustine Road North (4 acres)	borrow pit, fertile	largemouth bass, channel catfish, redear sunfish, bluegill, sunshine bass
St. Augustine Road South (12 acres)	borrow pit, fertile	largemouth bass, channel catfish, redear sunfish bluegill, sunshine bass
Bethesda (18 acres)	borrow pit, sandy bottom, fertile	largemouth bass, channel catfish, bluegill, redear sunfish, sunshine bass

Brochures are available showing the location and providing the specific rules and regulations for each of these ponds. For free copies, contact the Game and Fresh Water Fish Commission, Northeast Region office, Route 7, Box 440, Lake City, FL 32055.

Dual Crown For TSALA APOPKA

By Max Hunn

The Tsala Apopka chain of lakes, between Floral City on the south and Hernando on the north, is one of Florida's less publicized bass territories. While it may not be as famous as some other state waters, it now has a surprising distinction; two of the world record bass caught on fly rods came from Tsala Apopka.

In achieving this record, Tsala Apopka waters had to dethrone Lake George, one of Florida's most famous lakes. Until March of this year, Lake George had yielded two world record bass on fly rods; both hooked and landed by Charles Bain Wiles. He was on the rolls for both the 12-pound tippet class with a 9 pound, 4 ounce bass; and for the 16-pound tippet class with an 11 pound, 2 ounce bass.

However, the situation changed when Bob Ekker of Inverness landed a 12-pound, 9 ounce bass while fly fishing one of the coves off Lake Henderson, on the outskirts of Inverness. Fishing from a 12-foot fiberglass johnboat, Ekker landed the new world record largemouth bass for 12-pound tippet class after a 15-minute battle. He said it seemed like it "took hours" to reel in the record fish.

The fish was weighed at Happy's Bait and Tackle Shop in Inverness by "Woody" Woodard. Initially, the fact it was a record fish went almost unnoticed. Woodard wasn't thinking of a world record while weighing the fish, but when Ekker remarked that the fish had given him at least a 15-minute battle on his fly rod, Woodard realized he'd just weighed a potential record.

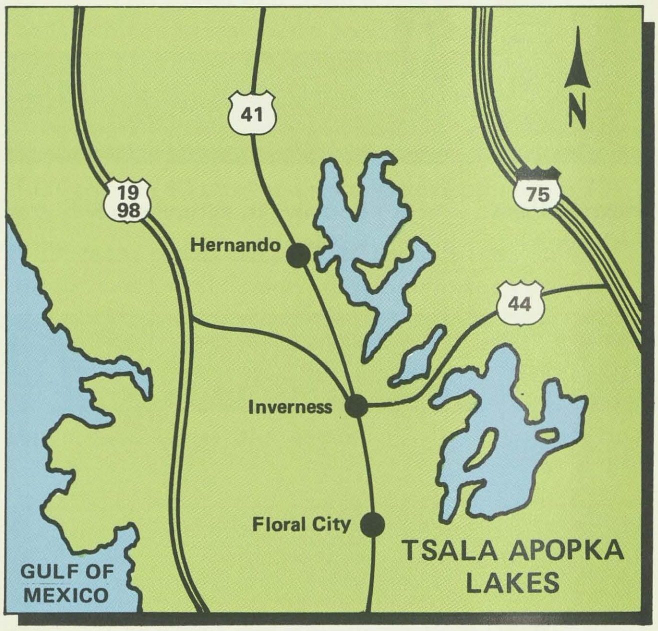
A check of the 1983 International Game Fish Association (IGFA) records showed the record for the 12-pound tippet class was 9 pounds, 4 ounces. Ekker's fish had surpassed the former record by 3 pounds, 5 ounces!

Commission fisheries biologist Sam McKinney verified the bass was *Micropterus salmoides floridanus*. The fish was weighed on scales that are regularly inspected and certified by the Florida Department of Agriculture and Consumer Services.

"There's no doubt I was really lucky," Ekker commented. "The bass was solidly hooked in the roof of the mouth. She hit where there were no bonnets to make it easy to break the line.

"She also hit near deep water and sounded immediately—but there were no underwater obstructions. And I was lucky to land her without a net!"

He used a 9-foot Eagle Claw fly rod with Cortland level floating line (L9F) and a Perrine automatic reel. Ekker has been fly fishing for 11 years, and now he fishes for bass exclusively with a fly rod. He uses popping bugs as his primary type of lure.

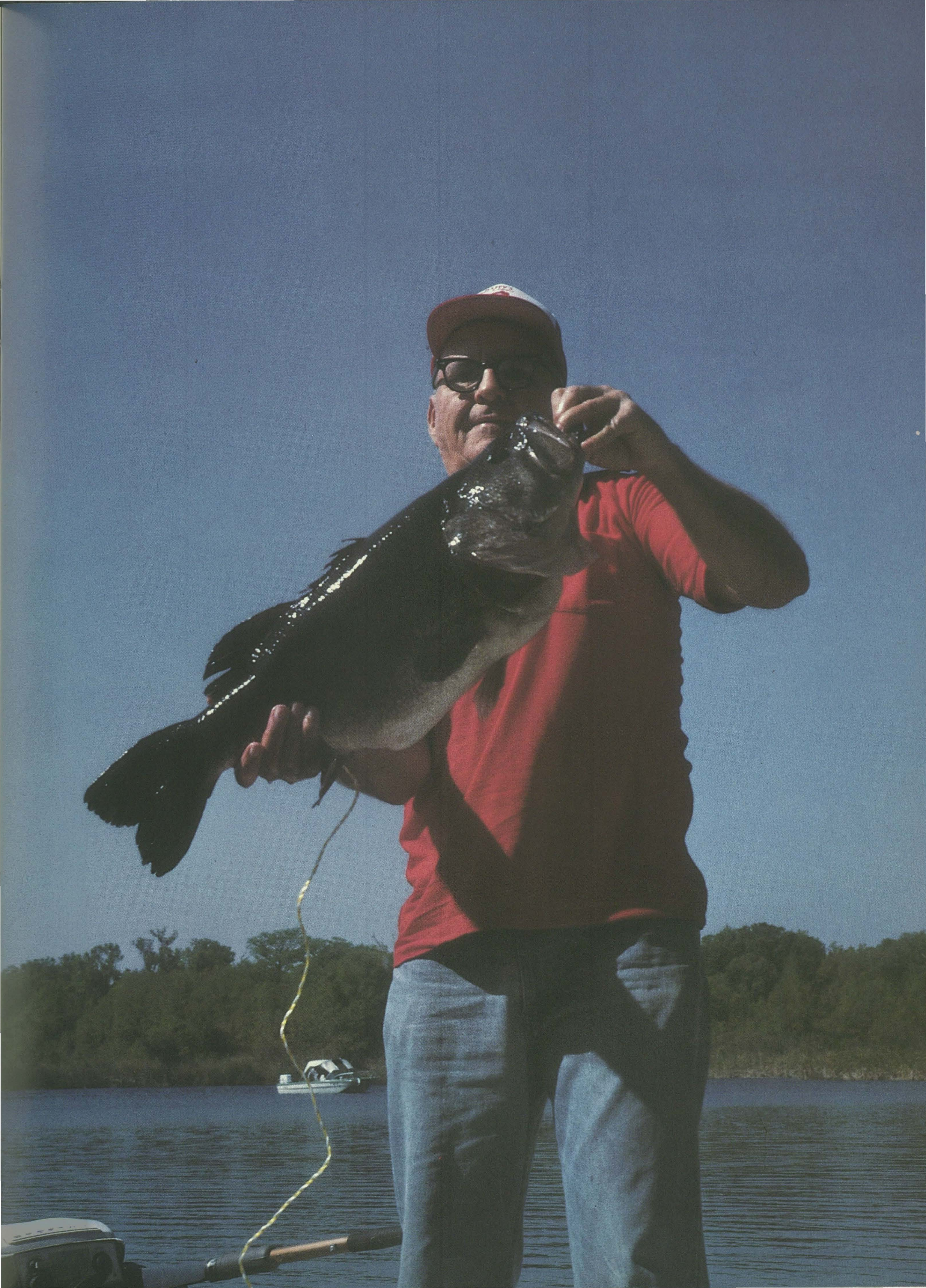


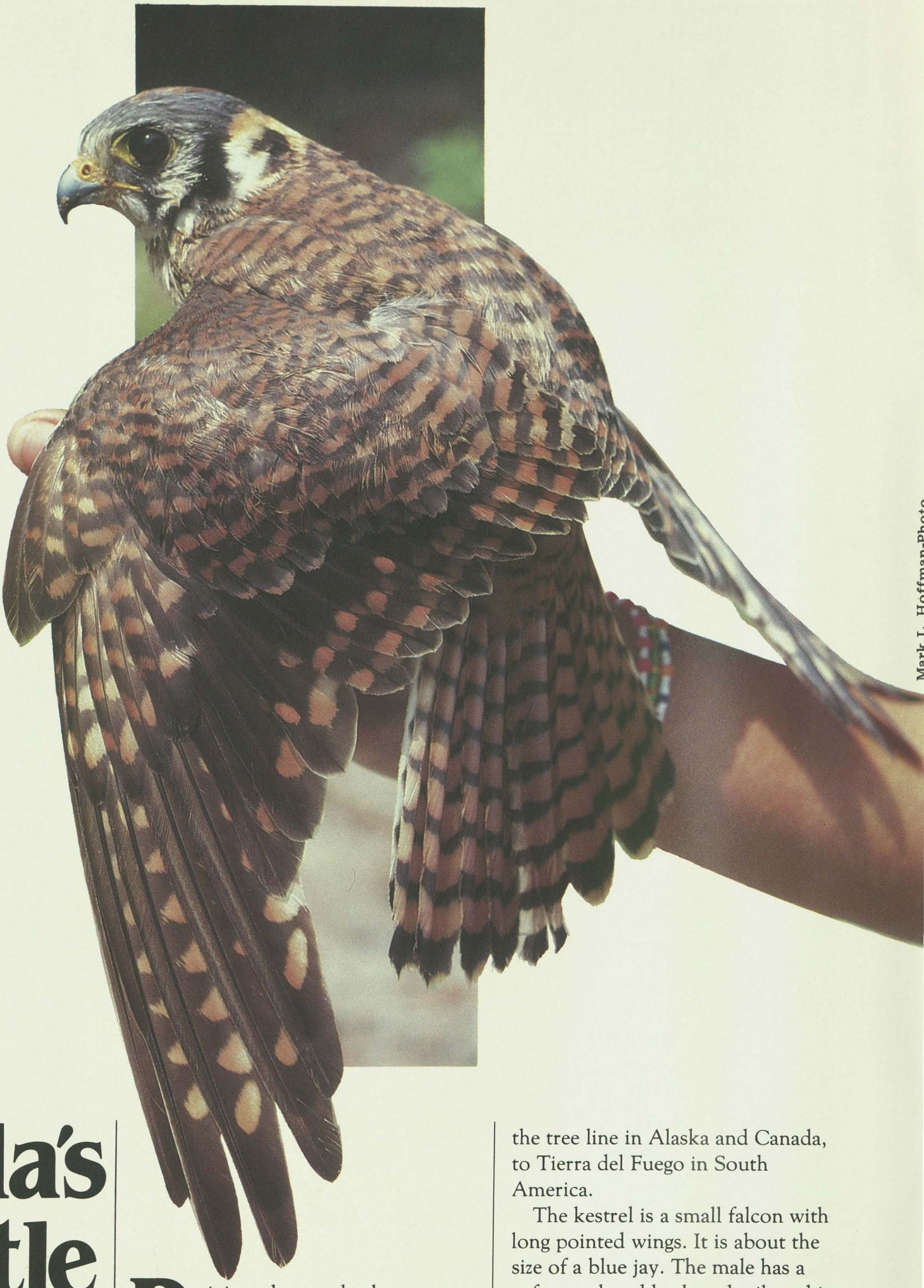
While, as a rule, Ekker releases his bass, he's making an exception in this case and is having this prize catch mounted.

Ekker was not only lucky to land his record fish, but he was also fortunate that a neighbor witnessed it. IGFA rules require that any record claimed for a fly rod be witnessed.

The other world fly rod record set in Tsala Apopka waters is for the 4-pound tippet class. That fish weighed 6 pounds, 7 ounces, and was caught by Terry G. Warson in 1977. Of the five IGFA fly rod tippet classes, three of the records have been set in Florida waters. □

Max Hunn-Photo





Mark L. Hoffman Photo

Florida's Little Falcon

By Susan Foran, Michael W. Collopy, Mark L. Hoffman and Petra G. Bohall

Driving along a back country road or a major highway, it is common to see a small, hawk-like bird conspicuously perched on a fence post or telephone wire. This is often the American kestrel (*Falco sparverius*) or "sparrow hawk," the most common falcon in North America. This species is widespread and ranges in North America from near the tree line in Alaska and Canada, to Tierra del Fuego in South America.

The kestrel is a small falcon with long pointed wings. It is about the size of a blue jay. The male has a rufous-colored back and tail, and is distinguishable from the female by his blue-gray wings and black and white-tipped tail band. The male's underside is buff with small black spots. The female is rufous-brown with traverse black bars on the back, and her undersides are streaked with brown.

There are two subspecies of the American kestrel which occur

Florida State Museum Archives-Photo

Charles Doe, Oologist

regularly in Florida: *Falco sparverius paulus*, a permanent resident, and *Falco sparverius sparverius*, a winter migrant. The northern subspecies is usually slightly larger and has more spots on its underside. There is a great deal of variation within this subspecies, however, and these characteristics do not always provide reliable distinction.

Kestrels prefer open areas interspersed with dead trees, which they use both for nesting and perching. They may be considered lazy when it comes to nest building. They usually nest in abandoned woodpecker holes, where they lay their eggs directly on the debris found in the cavity.

Kestrels readily improvise when perch sites on dead trees are not available by perching on man-made structures such as fences and power lines. Perches play an important role in their feeding behavior. The birds will sit for hours at a time, scanning the ground for a potential meal. At the sight of movement, the little falcon swoops down, seizes the prey in its talons, then returns to the perch to devour the catch. Sometimes a kestrel will hover in flight over an area before plunging to the ground to snatch a meal. In Florida, their diet consists mainly of lizards and invertebrates, especially large insects such as grasshoppers. Occasionally they eat small rodents, birds and reptiles.

Kestrels avoid the harsh winters of the northeastern United States and eastern Canada by migrating to Southern regions. Florida's kestrel population increases as much as fourfold in some areas as a result of the influx. These migrants primarily reside in Florida from late August to mid-April, and they set up winter territories in open areas such as agricultural fields and pastures.

Although migrant and resident birds show many similarities, there are distinct behavioral differences. Unlike the Northern subspecies, Florida kestrels remain paired year-round on a breeding territory, an area that has both adequate feeding and nesting habitat. These dual requirements cause our resident ▷

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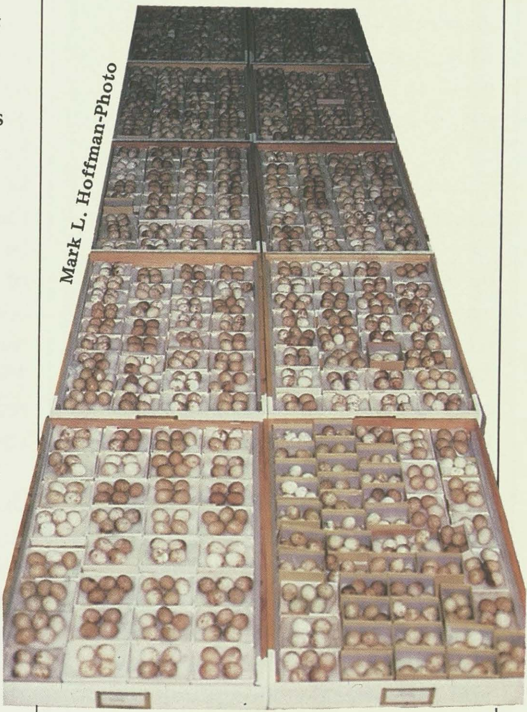


Mark L. Hoffman-Photo

Michael W. Collopy-Photo

Florida kestrel (*Falco sparverius paulus*) eggs were once in high demand by egg collectors because of the relatively limited range of this subspecies above. At right, Florida's little falcon is a colorful hawk-like bird, about the size of blue jay. They are sometimes seen perching on man-made objects, such as fences and power lines. Perches are important to their feeding as they spot prey from them. They may also return to their perch to feed on captured insects, small reptiles and field mice.

Because kestrels are frequently seen in winter, it appears the species is holding its own. This is true, however, only for the northern subspecies . . .

birds to occupy different habitats than the migrants. Open agricultural fields and pastures provide excellent feeding habitat, but often lack suitable nesting trees. Most resident birds are found in longleaf pine-turkey oak sandhill plant communities. These areas are relatively open and provide numerous snags for nesting. Pastures or fields adjacent to these open woodlands are sometimes included in their territories.

Courtship begins toward the end of January, and resident birds are often seen performing short, sporadic flights while calling to each other in high-pitched cries. The birds meet at a favorite tree, and the male offers the female a free meal. This courtship feeding is a common ritual and helps to strengthen the pair bond which exists between them.

Another part of courtship is selection of a suitable nesting tree. The nest is usually located in a woodpecker hole, 15 to 40 feet above ground in a pine snag. Three to five eggs are laid between mid-March and May. Incubation lasts approximately 30 days. The female is responsible for most of the incubation, while the male has the full-time job of feeding the female. The male does not bring the food directly to the incubating female, but calls her off the nest to receive it nearby. The male continues to feed the female throughout incubation and even after the young have hatched. As the fledglings get older, the female leaves the nest and assists the male in feeding them. The young are ready to fly about 30 days after hatching, but a family may stay together for several weeks longer until the fledglings can proficiently hunt for themselves.

Because kestrels are frequently seen in winter, it appears the species is holding its own. This is true, however, only for the northern subspecies, whose numbers are remaining stable or even increasing in some areas. Florida's regional population has actually declined in number, and is presently listed as threatened in this state.

Until recently, little was known about either the magnitude or cause of the Florida kestrel's decline and only speculations had been made. To assess the magnitude of the bird's decline, historical records of kestrel abundance were needed so that present-day comparisons could be made. Oologists provided some of this information. Oology, the collection and study of bird eggs, was a popular hobby in the early 1900s, but today the practice is restricted and can only be conducted under special permit.

Because of its subspecific distinction, Florida kestrel eggs historically were of higher value than eggs from the rest of the United States, so great efforts were put forth to locate these prizes. Many sets were collected. The eggs themselves are not as important as

Univ. of Fla.-Photo

the information recorded along with them. In collecting particular clutches of eggs, oologists often recorded information such as the route traveled to get to the nest, the nest location and nesting habitat. This type of information can be very useful in conducting present day studies.

Charles Doe was a very prominent oologist in the early part of the century. He was particularly active in north-central Florida and collected nearly 400 clutches of eggs from the resident population. He found an abundance of kestrels nesting in agricultural areas of western Alachua and northwestern Levy counties.

Formerly these areas had been covered by a mixture of longleaf pine forests and hardwood hammocks. In the 1930s, mechanized farm equipment was scarce, and with the use of only mules or oxen, the deep-rooted longleaf pine stumps were almost impossible to remove. Consequently, it was easier for farmers to just leave entire trees standing in their pastures and fields. These trees, when killed by lightning or disease, provided woodpeckers, and subsequently kestrels, with snags for nesting. In these times kestrels had an abundance of snags for nesting, surrounded by open fields in which to hunt.

Then came tractors. It was no longer a burden to remove tree stumps, so existing and future kestrel nesting sites were eliminated. Recent studies in areas formerly traveled by Doe reveal a drastic decline (approximately 90 percent) in kestrel numbers. In these areas, it is likely that loss of nest snags is responsible for their decline, since feeding habitat still exists.

The situation is different in south-central Florida, where both feeding and nesting habitat have been lost. An oologist named Donald Nicholson explored this area in the early 1900s, particularly Lake, Orange and Seminole counties, in search of kestrel eggs. His field notes indicated the kestrel was formerly widespread over the south-central region of Florida. He found the birds nesting in longleaf pine-turkey oak sandhills, similar to those in which they nest today. Nicholson expressed his concern for the declining number of kestrels as early as 1920, and noted they had become a rare breeder in south-central Florida by 1940.

Nicholson blamed the kestrel's decline in these areas on the clearing of land and the removal of trees. The result for the Florida kestrel was the loss of both feeding and nesting habitat.

Michael W. Collopy-Photo

Above, a Florida kestrel hovers in midair as it spots prey below. On the facing page, citrus groves now occupy some of this subspecies' former nesting habitat.

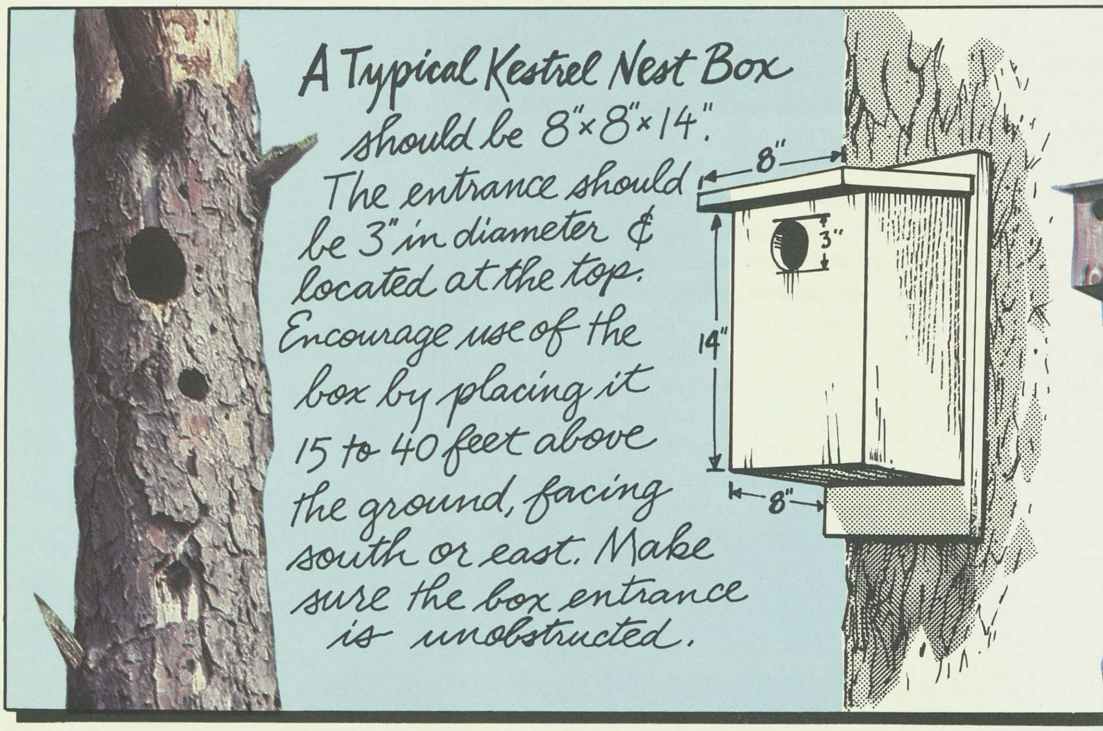
The decline of the resident subspecies is by no means limited to the Florida counties explored by Doe and Nicholson. There is no doubt the same factor, habitat destruction, is taking its toll in other parts of the state as well. This problem is not unique to the kestrel, but applies to nearly all wildlife species. ▷

Then came tractors. It was no longer a burden to remove tree stumps, so existing and future kestrel nesting sites were eliminated.

Nest boxes have been used extensively in other states, and have proved very effective in maintaining and even increasing kestrel populations.

For kestrels, one of the most effective management techniques is the use of nest boxes to supplement natural nesting sites. Nest boxes have been used extensively in other states, and have proved very effective in maintaining and even increasing kestrel populations. The effectiveness of the boxes depends greatly on their construction and placement.

A typical nest box is rectangular in shape, with dimensions of about 8"x8"x14". The entrance should be approximately three inches in diameter and located towards the top of the box. Kestrels readily nest in such boxes if they are placed 15 to 40 feet above ground and facing south or east. Boxes are most successful when placed in lone trees in or on the edge of pastures or fields. The area in front of the nest entrance should be clear of obstructions, such as shrubs or tree limbs.

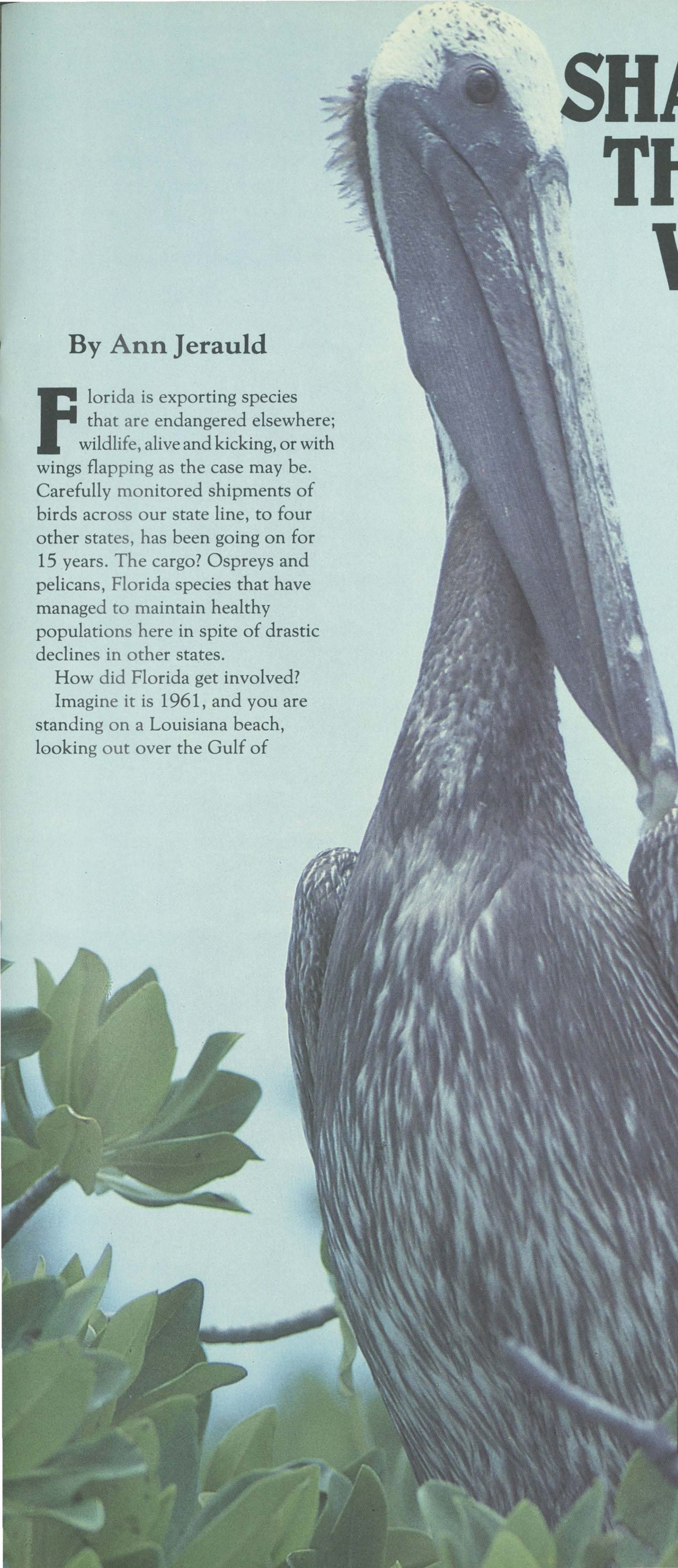


A Typical Kestrel Nest Box should be 8"×8"×14". The entrance should be 3" in diameter & located at the top. Encourage use of the box by placing it 15 to 40 feet above the ground, facing south or east. Make sure the box entrance is unobstructed.

Mark L. Hoffman-Photo

Mark L. Hoffman-Photo

Further information on the construction or placement of kestrel nest boxes can be obtained by contacting a wildlife biologist at your nearest Game and Fresh Water Fish Commission office or such organizations as Kestrel Karetakers and your local chapter of the Audubon Society. □



SHARING THE WEALTH

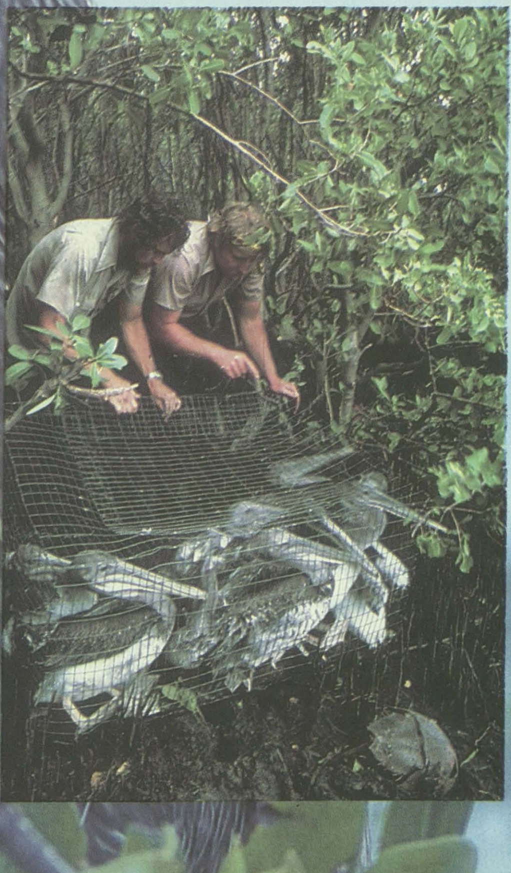
By Ann Jerauld

Florida is exporting species that are endangered elsewhere; wildlife, alive and kicking, or with wings flapping as the case may be. Carefully monitored shipments of birds across our state line, to four other states, has been going on for 15 years. The cargo? Ospreys and pelicans, Florida species that have managed to maintain healthy populations here in spite of drastic declines in other states.

How did Florida get involved?

Imagine it is 1961, and you are standing on a Louisiana beach, looking out over the Gulf of Mexico. To many of us, this would have been a tranquil scene, complete in its simplicity, but to Louisiana wildlife biologists that year, it was a time for mourning. Louisiana's state bird, the brown pelican, was no longer breeding there. Once an abundant resident with a population estimated at 50,000 to 85,000 birds, pelicans had become very rare visitors to Louisiana. ▷

When Louisiana needed pelicans, the Florida Game and Fresh Water Fish Commission provided them. Between 1968 and 1980, 1,321 nestlings were relocated to Louisiana, and they now form an estimated population of 2,500 as a result of successful reproduction there.



Stephen Nesbitt-Photo

Stephen Nesbitt-Photo

In 1966, the Louisiana Wildlife and Fisheries Commission (LWFC) asked if some of Florida's pelicans could be sent to Louisiana, so a yearly restocking program was undertaken by the Florida Game and Fresh Water Fish Commission. Between 1968 and 1980, 1,321 nestling pelicans, eight to 11 weeks old were captured in Florida and trucked to Louisiana. There, they began to nest again.

1983 was a banner year. One thousand new birds hatched in Louisiana, bringing the total number of brown pelicans there to at least 2,500 birds. This has been the best reproduction year yet for the transplanted population.

These results are encouraging, but an air of caution still prevails among wildlife experts. The Louisiana pelicans live near the northernmost limit of their breeding range, where they are subject to severe storms blowing in from the Gulf of Mexico. And the pelicans there still face the threat of other chemical-related incidents, similar to the massive fish and bird kills caused by the pesticide endrin in the early 1960s. A combination of weather and pesticides probably contributed to the demise of pelicans in Louisiana by killing them directly, damaging their eggs or adversely affecting their sole food source, fish.

But today, things look very good and there are no present plans for further exports of Florida pelicans to Louisiana.

"I think, for right now, we need to sit back and evaluate the success of this program," says LWFC biologist Larry McNease. He is quick to praise the cooperation from the Florida Commission biologists, adding, "The process went beautifully. Florida was not only helpful," he says enthusiastically, "but the Florida biologists took it upon themselves to do over 99 percent of the work of capturing the birds."

While the pelican confines its fishing expertise to salt water, the osprey, or "fish hawk," is an expert angler in both fresh and salt water. To understand why biologists from Tennessee Valley Authority (TVA) asked for help from Florida, consider and compare the osprey population on three particular lakes in north Florida to those of scores of lakes and rivers in the seven-state area under the TVA's jurisdiction. The three Florida lakes had osprey populations which exceeded TVA's osprey total by almost 12 to one!

There are now eight active nests in the Tennessee River valley, a slow but significant improvement over the only two that existed there in the 1950s. As near as can be determined, from sketchy accounts written in the early 1900s, there were probably only 20 to 30 nests along the major river systems in the mid-south. The osprey population in the Tennessee River valley suffered a major decline as the result of some timber harvesting practices, indiscriminate shooting and pesticide poisoning. Populations of golden eagles and bald eagles suffered as well.

In 1978, TVA officials began to capture young ospreys in Maryland, Virginia and North Carolina for release in Tennessee, Alabama and Kentucky. Florida joined the effort in 1982 and 1983 by exporting 21 nestling ospreys.

Once captured, the birds were banded, put in comfortable cages and flown to their new homes. There, they were placed on artificial nest platforms, where they were fed cut fish until they were able to fly and fish for themselves. This gentle release process is called "hacking" and it allows the birds to achieve total independence by limiting human contact, and by encouraging independent hunting and fishing, both of which are instinctual behaviors of ospreys.

The ospreys will eventually form an attachment to their release sites, when they take their first flight, rather than to locations where they hatched. Thus, the north Florida lakes will become just another stopover for these ospreys on their annual migration flights to and from South America.

Later this summer, more Florida ospreys will find new homes in the Tennessee River valley and will help TVA reach its goal of 50 active nests by the next decade. □

Robert Kollar-Photo

The Commission also caught and relocated Florida ospreys to various locations in the Tennessee River valley. At right, they are carefully restrained for shipping. At the far right, one of the relocated birds sits atop a nest platform.

Stephen Nesbitt-Photo

Robert Kollar-Photo

The Florida Panther Living

Few would disagree the Florida panther (*Felis concolor coryi*) is North America's most endangered mammal. This great cat is a subspecies of *Felis concolor*, more commonly known as the puma, cougar or mountain lion of the West. Game and Fresh Water Fish Commission biologists and other scientists who are familiar with the state's small, aging, known populations say the magnificent secretive cat has been found only in the Big Cypress and Everglades regions of south Florida and just recently, signs have been confirmed which indicate panthers may also live in Volusia County.

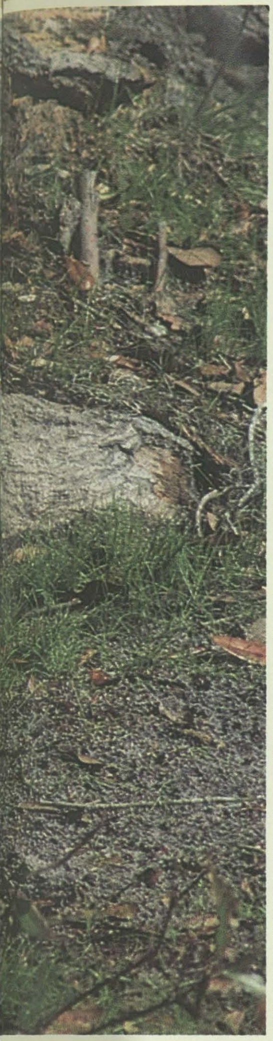
An unexpected finding of panther tracks and a freshly killed deer was made by Bob Stevens of Daytona in April while he was turkey hunting. Stevens said he first heard the panther scream, about 75 yards from where he was listening for turkeys gobbling.

Neither Stevens nor the Commission's field experts saw the panther, but plaster of Paris casts of tracks at the site were made, and it was determined they were definitely panther tracks. Very often, tracks are the only signs available to indicate this shy animal is around.

The Sunshine State has had panthers in the wild for eons, but they are now quite rare. Although the number of panthers remaining in Florida is unknown, it is certain that very few of these animals remain in the wild, and there is a limited amount of suitable habitat remaining for them.

Much is still unknown about the Florida panther. Of all the species of wildlife living in Florida, this animal is one that is not readily available for scientific study or easy observation.

Eight Florida panthers have been captured and fitted with light-weight radio transmitting collars, which enable scientists to track them day or night by using directional receiving equipment. From these scientific tracking studies, much has been learned about range requirements of the Florida panther. For example, a female in the Fakahatchee Strand was found to occupy some 40 square miles of territory, and around the Raccoon Point area in the eastern portion of the Big Cypress Preserve, a male was tracked over some 200



Michael Francis-Photo

Mark J. Barrett-Photo

on the Edge

By John Waters Jr.

square miles of area that extended far into the sawgrass prairies of the Everglades. Apparently, this broad-ranging male occupied this very large territory to meet food requirements. Panthers swim quite readily.

Telemetry tracking has also shown these big cats travel both day and night during the winter months. In the summer, perhaps because of the heat, they travel more at night than in the day. Points where radio-collared panthers routinely cross highways have been analyzed and this important information has resulted in recommendations from the Commission to the Department of Transportation (DOT) to provide safe panther crossings as part of DOT's planned rebuilding and upgrading of Highway 29 and Alligator Alley. The latter is to become part of Interstate 75. Four Florida panthers have been killed by vehicles in this area since 1979.

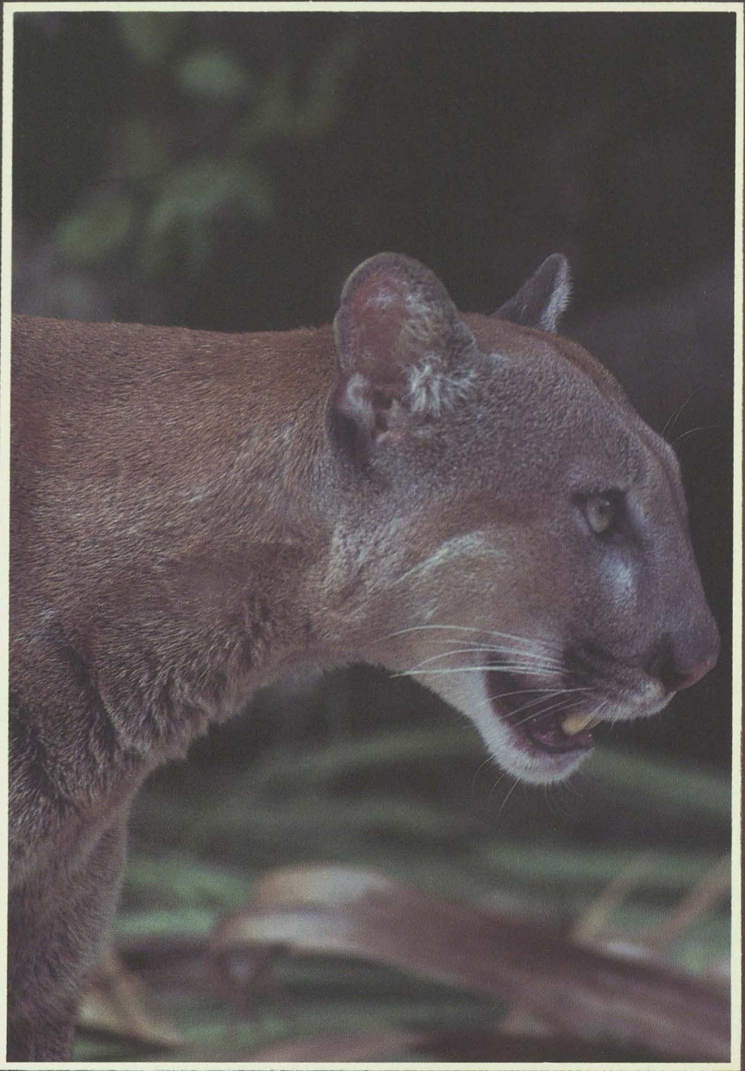
Even mating behavior can be monitored somewhat by radio-telemetry tracking. When a radio-collared male and radio-collared female are monitored ranging together, it can be inferred that they are also mating, since these animals normally occupy separate territories. After conception occurs, female panthers become more sedentary, another fact that has been learned from radio-telemetry studies by the Commission.

Mating normally occurs between January and March, and the usual litter of two to four kittens are born with closed eyes between 92 and 95 days after mating. The movements of the female during this gestation period, as well as her movements with litters, can be tracked by radio. In addition to electronic data, tracks in soil can tell much about the panther's habits.

Once the kittens' eyes are open, a week to 10 days after birth, they have a blue color. This changes to a yellowish brown as they mature. Also, kittens are rather speckled with dark spots but, as they mature, their color becomes a tawny brown with light underparts—similar to the colors of white-tailed deer, a favored prey of the Florida panther. Sexual maturity does not occur until the cats are about two years of age. ▷

The Florida Panther, *Felis concolor coryi*

John Roberge



Lynn M. Stone-Photo

Michael Francis-Photo

Living on the Edge

Mark J. Barrett-Photo

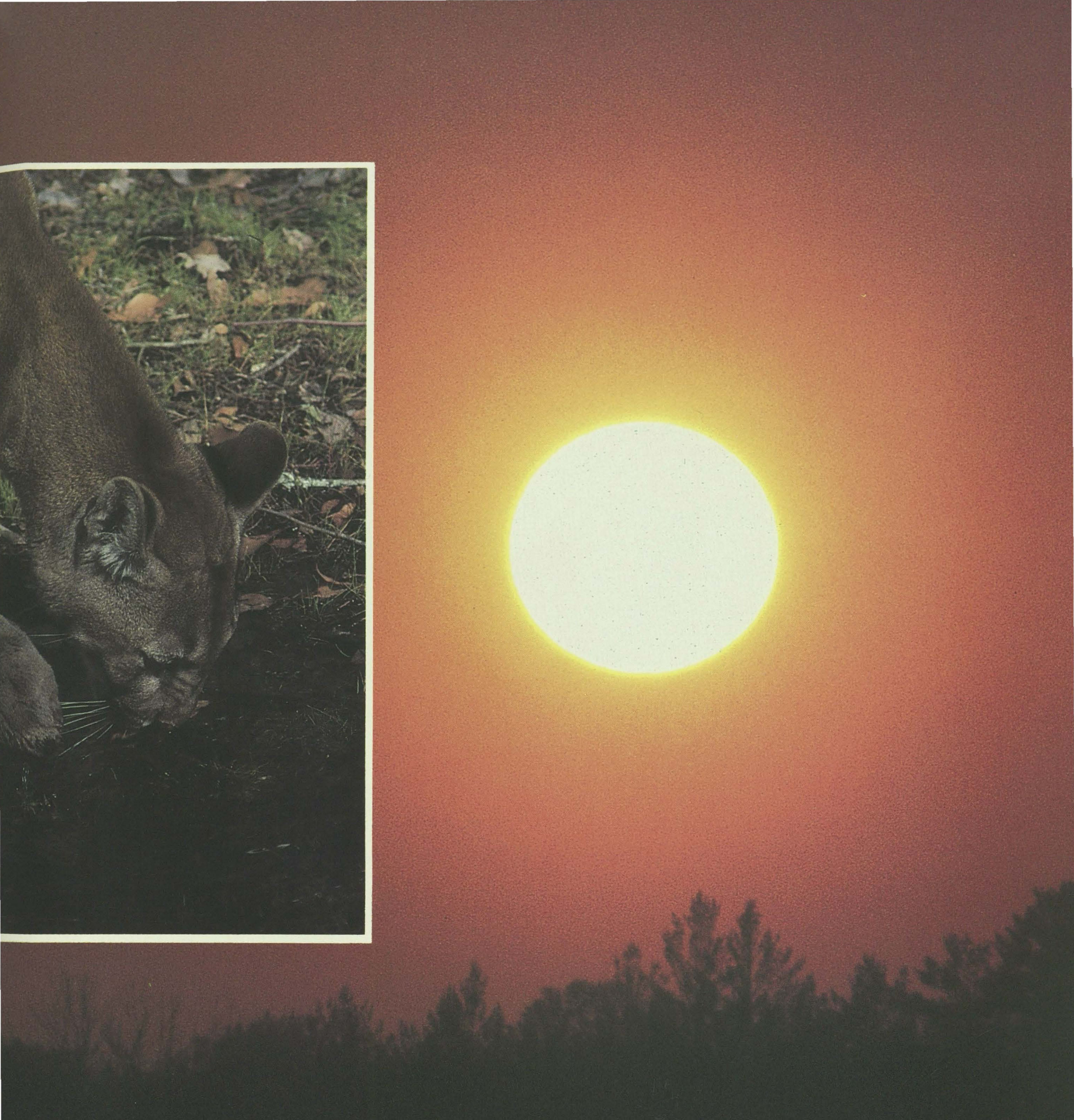
When they are strong enough, the kittens learn to hunt from the female. When panther kittens learn to hunt, the acquisition of appropriate behaviors is partially instinctive and partially learned by following the female. She teaches by instinctive demonstration, such as leading them to prey and by showing them other experiences of hunting. She may also inflict punishment upon them, as part of teaching them what not to do.

The vital statistics of Florida panther birth and mortality are not completely known, but there is hope that natural reproduction rates will exceed deaths. If these hopes are not realized in their present habitat, reintroduction to suitable habitat elsewhere will become even more important.

Most preferred as food are the white-tailed deer and wild hog, which a panther kills with a quick grip of its jaws. It can break a deer's neck in a flash. Because these large cats expend many calories, it is advantageous if deer and hogs are eaten; however, if a rabbit happens by and the big cat is hungry, it may kill and consume it. Armadillos are readily taken when the opportunity occurs.

When larger prey is killed, the remainder after feeding is often stashed by partially covering the carcass with debris and soil. The deer carcass which Stevens found and led Commission investigators to see was covered this characteristic way.

Much has been accomplished from the Commission's research into the status of this



endangered species. Already, tracking data have greatly broadened the knowledge of its life cycles and daily habits. With this understanding as a basis for future research, much more is expected to be learned.

There is hope that the Commission's research and protection of the Florida panther will prevent extinction, and that their numbers can be increased. Although much of the panther's former habitat is no longer capable of sustaining them, some of their former range may still support them. The public's attitude and awareness that the Florida panther is not a predator to be destroyed are also important to their continued existence.

There is a race going on with this subspecies—a race against time and the very real possibility of the Florida panther's extinction. Never before has this endangered mammal depended so much on the human population for its continued survival. Only at some future date will we know if Florida's state animal will continue to live in the wild, or only in the pictures printed in books and magazines. □

The Endangered Wood Stork

Text and Photography By Jim Angy

At one time, large number of wood storks (*Mycteria americana*) could be found in many parts of Florida. Researchers estimate there may have been 20,000 to 25,000 nesting pairs during the 1930s. The storks were so abundant that **biologists did not notice they** were in trouble until the 1950s.

By 1960, the wood stork population had dwindled to about 11,000 nesting pairs, and each year since then, the number of nesting pairs has steadily diminished. A 1980 census revealed less than 5,000 pairs nesting in Florida.

Once known as the wood ibis, the wood stork is one of Florida's endangered species. Only recently has this species been added to the federal list of endangered species.

These large wading birds are the only storks native to North America. Adults stand about three and one-half feet tall and have a wingspan over five feet. Black flight feathers and a black tail offset the white plumage of this stately bird. ▷

Robert Kollar-Photo

Wood storks depend much on availability of shallow, food-laden water, left, to catch food for their young, above.

Jim Angy-Photo

Mature wood storks have no feathers on their large blackish-grey heads and this feature has earned them the local names "iron head" or "flinthead."

The nesting success of wood storks depends largely on environmental conditions. Wildlife biologists have determined that man's manipulation of the wood stork's habitat has greatly contributed to their decline. Water level fluctuations within their feeding grounds drastically affect their breeding activity.

Nesting begins during the dry months and, depending on location, may last from December to July. During this time of year, marsh lands dry up and large concentrations of fish become trapped in shallow ponds. The wood stork's feeding habits make high concentrations of aquatic life necessary, if they are to feed their hungry nestlings. With their large bills slightly opened, adult storks probe beneath the shallow water, snapping up any food their sensitive beaks bump into.

The parents feed their offspring for about 11 weeks and, if food becomes difficult to obtain during this time, many young storks will perish from starvation.

With canals, dykes, ditches and levees, man now controls the water level in much of the wood stork's feeding and nesting areas. These wetlands are being drained during the rainy season and flooded during times of drought. Their natural cycles, which once produced large, seasonal concentrations of fish, have been disrupted and as a result, wood storks are disappearing. The wood stork exemplifies how a species adapts to seasonal changes within its environment.

Only about 20 wood stork nesting colonies remain in Florida. If the current trend continues, wildlife biologists fear the wood stork may become extinct within the next 20 to 30 years. The problem facing the remaining storks is very difficult, for it involves the management of water throughout much of their habitat.
The success in solving this complex problem will determine if North America's only stork will survive. ☐

COYOTE

By Carolee Boyles-Sprenkel

At dusk, a howling cry interspersed with barks rises from a nearly hilltop. Within a few minutes, another voice joins in from close by, then still others. Some take up the chorus from more than a mile away. You're hearing the singing of coyotes, a common sound in Oklahoma, Arizona, Texas, Colorado and isolated parts of Florida.

That's right, Florida! And a good part of the remaining Eastern United States as well. The coyote (*Canis latrans*) is steadily expanding its range eastward, and as it spreads, so does the debate over its effects on other wildlife species and man's domestic animals.

The coyote, also called the brush wolf or prairie wolf, has been around as a distinct species since at least the Pleistocene, evolving as long ago as a million years. As its ▷

genus name indicates, the coyote is closely related to wolves (*Canis lupus*) and the domestic dog (*Canis familiaris*) and will interbreed with both on occasion.

The coyote is well represented in North American art and folklore from the time of Central Mexico's Aztecs through modern times, and it has been endowed with many fantastic and mythical abilities. Even its name is exotic. *Coyote* (pronounced *ki-oat*) is a Spanish variant of the Aztec word *coyotl*. By the 1800s, the word *coyote* was in wide use in the United States, along with such spellings as *ciote, cuyota, kiyot*, and *cayeute*.

The quickest way to describe a coyote is to say it looks like a small wolf. It may stand as high as 26 inches at the shoulder, although most are shorter. Length of its head and body range from three to five and one-half feet, and its tail may be 16 inches long. Females are smaller than males, and may weigh as little as 20 pounds. A large, well-fed male can tip the scales at 50 pounds or so.

The movement of coyotes into Florida seems to be part of an overall range expansion. Humans have cleared dense forests in the East, producing a mosaic of woodland, scrub, and farm land habitats that coyotes find to be suitable.

The coyote's march into Florida also may have been hastened by intentional or unintentional releases of these animals by people at several locations around the state.

Captain Kyle Hill, of the Game and Fresh Water Fish Commission's Division of Law Enforcement, lists other reasons the coyote is doing so well:

"The coyote is just an extremely successful predator," Hill says. "He's able to compete in areas where our red and grey wolf populations have dwindled. We don't have those populations here in Florida anymore. They were extirpated long ago.

"The coyote is an opportunistic feeder. He takes live or dead prey and he eats many rodents and rabbits."

Most of the coyote sightings and reports are clustered in two distinct areas of Florida (for a map, see the March-April 1983 issue of FLORIDA WILDLIFE). The majority of reports occur from Gadsden County westward, but another population center seems to be located in the Hamilton County-Columbia County area. Isolated specimens and reports have also come from Dixie, Lake, Marion, and Orange counties.

Since no one is doing extensive research on the coyote in Florida, information about this species' habits must be inferred from other sources. Dr. H.T. Gier, a Kansas State University researcher, says coyote families come into being in the winter there, when females come into heat. At this time, they normally attract several males. Gier observed coyotes in their natural habitats, and he believes a female selects her single mate, rather than the males fighting over her.

The pair then chooses a den site, generally a hole in the ground. In other parts of the country, coyotes occupy uninhabited badger, marmot, or skunk dens, or dig a new one.

Pups, usually two to eight, but rarely 12 in number, are born 60 to 65 days after mating. Initially they nurse the female, but when the pups are 12 to 15 days old, both parents begin feeding them solid food, first by regurgitation, then by bringing small food items such as mice into the den. After regurgitation feeding is established, the male can raise the pups successfully even if the female dies. If a litter dies, females are not able to reproduce again until the following year.

Coyotes eat just about anything, but concentrate on rodents and other small prey. They also consume carrion when they can get it, including deer carcasses; however, researchers in other states have found little evidence that coyotes kill deer. They likely have no effect on Florida's deer herd.

James Brady, a biologist with the Commission's Bureau of Wildlife Research in Gainesville, said Florida has not experienced a significant problem yet. "Coyotes have a demonstrated potential for depradations on livestock," he says. "They're large enough to take larger and more livestock than most of our native predators can, but I don't expect we will have the magnitude of the problem here that they do out West. We just don't raise that kind of livestock in most of Florida."

However, Brady is concerned about the effects coyotes may have on some of our native wildlife. "They *may* impact our native fox population," he says. "That's kind of theoretical, but I think that in some areas it's believed that where coyotes have moved in, they have tended to push out or outcompete some of our native fox populations. I don't know to what degree that may happen, or to what degree it's already happened in some areas. It would have to be a drastic thing for you to really document it."

In Florida, the coyote is an unprotected game species, and may be taken year-round by any legal means, including shooting and trapping.

Probably the coyote's most commonly known feature is its voice. Archer Gilfillian described it this way:

> The peculiar thing about the coyote song is that when two coyotes are singing a duet ... they do not bark haphazardly or in unison, but they catch each other up with lightning-like quickness ... On a cold winter's night you will hear this two-piece orchestra tuning up on some distant butte, and then miles away in another direction you will hear an answering chorus; then the cry will be picked up in still other directions, until it seems as if the whole landscape were tossing this weird melody up towards the cold and unappreciative stars.

So, some cool Florida night, if you hear what you think is a singing coyote, you may be right. □

Tim Brush Gunsmith

Text and Photographs By John Waters Jr.

Since the first gunsmiths put together contraptions capable of firing a projectile through a hollow barrel, these craftsmen have been at work building and repairing guns. The many steps to their craft are seldom seen as they busily work in their shops to manufacture new stocks for old guns, replace rusty, pitted barrel surfaces with shiny new blue finishes, or sometimes manufacture a replacement part.

Tim Brush, a master gunsmith who recently moved from Cocoa Beach to the woods near Havana, a few miles northwest of Tallahassee, is one of these skilled artisans. He began his career eight years ago when he entered the Colorado School of Trades for two years of study and practice under the personal direction of some of America's foremost gunsmithing experts.

After gaining his background training and experience, Brush set up his own shop and began specializing in hot salts blueing and custom repair and refinishing of wooden stocks.

"I like working with both metal and wood, and by doing both kinds of work, I can restore guns to their original condition, or modify them to suit the individual needs of the owners," he said recently as he applied the final touch to an old military .45-caliber pistol.

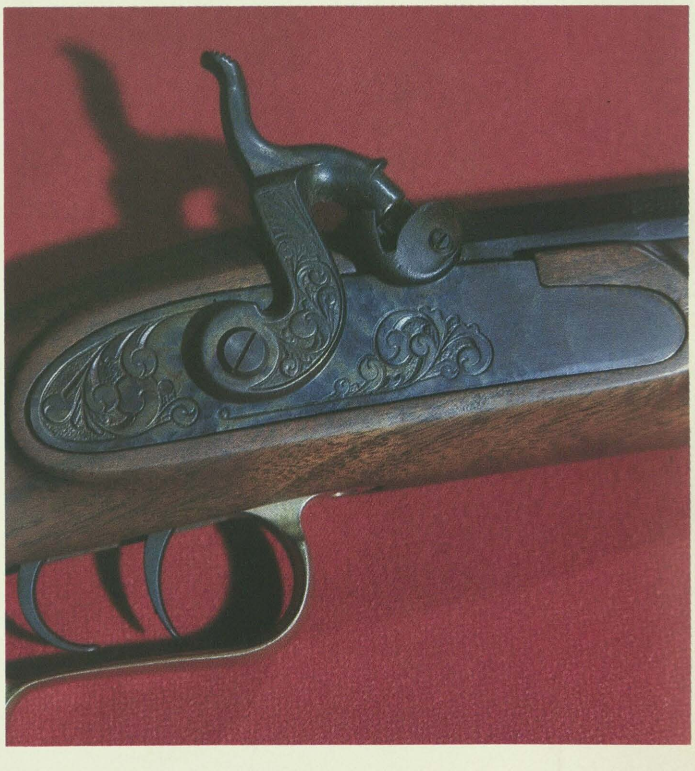
Depending on for what a gun will be used, a wide range of blueing finishes can be applied. Brush explains, "If the gun will be used for hunting, many hunters don't want a real shiny surface because it tends to glint in the sunlight and spook the game. So, what I do in that case is finish the metal with a matte blue surface, instead of a shiny blue."

The chemical treatment step of the blueing process is short. It is the careful preparation of the metal for blueing that takes much time, patience and skill. Machinery can be used on some surfaces, but Brush must often use hand tools and such materials as fine steel wool and emory cloth to remove old rust and corrosion pits on tight areas and small parts where a polishing wheel cannot reach. Sometimes, hand filing is necessary to shave the metal down so that pits are removed.

For octagonal barrels, he usually draw files them so they have truly flat surfaces and sharply angled corners. A round wheel does not work well on corners as it tends to round them off. One of the beauties of the octagonal shape is its angles.

Once cleaned and polished to a shine, metal to be blued cannot wait long before being placed in the 300-degrees Fahrenheit blueing salts solution. Freshly cleaned steel begins to rust immediately because of oxidation with atmospheric oxygen. Just before the barrels and other gun parts are immersed into a tank of ▷

Below, a restored muzzleloader looks new after master gunsmith Tim Brush has refinished it. Various steps of his work are shown on the facing page, including draw filing the flat surfaces of an octagonal barrel, polishing the main frame of a .45 caliber pistol and cutting a custom rifle stock from rock maple.



ARMS
SHIRE CAL54

boiling sodium hydroxide solution, Brush gives them one final cleaning with solvent to remove even the traces of oil left on the metal from his fingerprints.

"The steel must be perfectly clean," he emphasizes, "to get a top-notch finish. Any spots of oil on it will result in a weakening or thinning of the blueing at that spot."

It takes less than half an hour for the silvery bright steel to change color to the deep black-blue the hot salts process gives. During this treatment, Brush removes the metal from the salt bath several times, cleans it with cold water and steel wool for a moment, then reimmerses it. This periodic removal and cleaning is necessary to obtain a uniformly blued surface, as well as depth of the finish.

After blueing, the barrel and other gun parts are immersed in water—this time very hot water. This treatment causes the pores of the metal to expand, while also dissolving trace amounts of sodium hydroxide which remain attached to the metal surface. The complete removal of salts is just as important as the thorough chemical reaction of them with the steel, and the hot water does this best.

After about half an hour in the hot water tank, the wet parts are removed. Even though freshly blued, the metal is still prone to begin rusting instantly, so the next step is to dry the parts, then thoroughly soak them with oil.

"I oil the barrel and other parts, then wrap them up for several days," he says. "It takes several days of soaking for the oil to thoroughly penetrate all the pores of the metal. A lot of people think of metal as being solid, but it has pores, and if oil doesn't soak into these pores, the blueing won't last very long before it starts to rust."

Brush is skilled in working wood as well as metal, and there are many special techniques he uses for refinishing and restoring wood. Most of the work, again, is in preparation. He receives stocks that are broken and must be repaired, often by using hidden reinforcing pins, and sometimes gun owners bring him a plain stock they want "fancied up."

Tim Brush, Master Gunsmith

Checkering is one way Brush converts a plain stock into a work of art in wood. To do this, he first makes a pattern and transfers it to the stock, then he cuts the design into the wood with special hand tools made for this purpose. Those he uses are characteristic of checkering tools that have always been used in the craft. Some of his checkering tools are handmade.

Sometimes stocks are missing pieces and he must restore them with custom shaped matching wood. He also makes custom pistol grips from fine grained walnut and other suitable woods, and he can manufacture an entire stock. When Brush builds a stock, he tailors the length and other dimensions to fit the owner, as well as closely aligning the metal parts to the wood so the final result is a tight unit. Balance and feel must be adjusted by removing wood in just the right places and, when finished, it must feel "right" to the person who will be shooting it.

One of the more difficult-to-work woods from which he makes stocks is rock maple. "It's so hard a wood rasp won't cut it much," he said as he shaped a yard-long rock maple blank into a stock shape with a mallet and cutting chisel. "Black walnut, on the other hand, is often so soft you can dent it slightly with your thumb nail."

Rock maple must first be sawed and roughly shaped, then chiseled down to the basic form. It is rasped only to smooth it up, then, hand sanded and steel wooled until the surface is smooth and ready for staining.

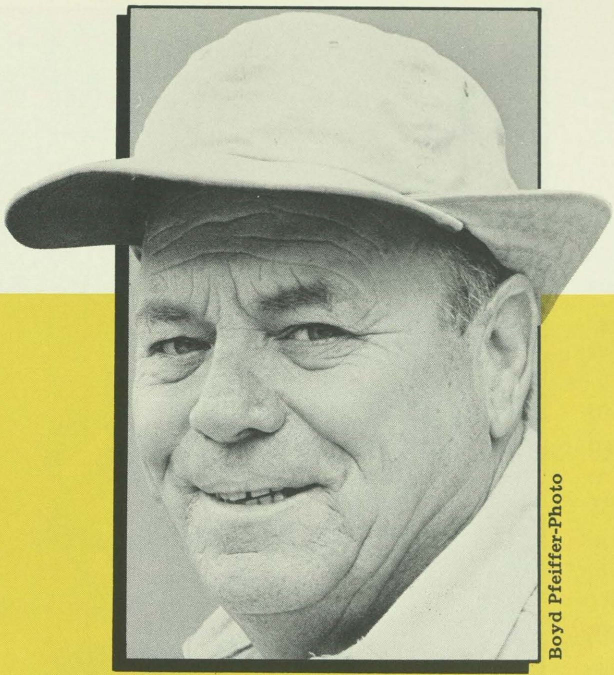
Brush uses tung oil, known for its excellent water repellent characteristics and for its hardness against wear. The wood staining pigments are dissolved in the tung oil, and several coats are applied to the properly prepared wood, with adequate time allowed between them.

"Wood is also porous," Brush explains, "and it takes several days of coating, hand rubbing, recoating and rubbing again to get a deep lustrous finish that won't easily wear off when the gun is taken out into the woods."

After Brush has disassembled, cleaned, reblued or repaired, and refinished an old gun, it looks new again. Then he has the fun of test firing it to be sure everything is in order, before he returns the gun to its owner.

"I really enjoy shooting," he says. "It's the part of the job that comes last, but a part of working with guns I like best."

To demonstrate his skill, he powdered up and inserted a .54-calibre slug into a recently finished muzzleloader, then hit an 18-inch piece of wood on top of his firewood pile. It spun around and fell from the pile as the shot hit the knothole near the end, exactly where he said it would. ☐


Boyd Pfeiffer-Photo

Lefty Kreh

Photo Tips From A Pro

By William A. Greer

Editor's note: In this interview with nationally known author-photographer Lefty Kreh, he offers useful tips for both novice and experienced photographers. Kreh's photographs have been published in numerous outdoors magazines. He has written two books on fishing, and was co-author of a third. At one time, Kreh held 12 world records for fly rod fishing. Presently, he is an outdoor editor for a Maryland newspaper.

How necessary is expensive camera equipment for achieving successful photographs?

You don't need the most expensive, but you don't want the cheapest either. You should have a good lens. I have found very good ones for around $125. The difference between moderately priced lenses and cheap ones is often very obvious in the pictures. In most cases, however, cameras can take better pictures than the people who use them.

Most photographers get too involved in equipment, and forget the most important element is the skill of the photographer. If you are taking poor pictures with a cheap camera, you won't improve with an expensive one. The difference between good and poor pictures is generally composition and use of light. These have very little to do with the cost of the camera.

What do you think of automatic cameras—those which select the shutter speed or aperture for you?

An automatic camera is good for the average amateur photographer, who just wants to take simple pictures. But if you want better-than-average images (to sell or enter competition), or if you need to photograph unusual lighting conditions such as backlight or sidelight, they do not work well. Of course, some automatics have a manual override feature, but then you may as well have a manual camera.

Do you feel you learn as much from using an automatic camera?

I think you learn less. When a photographer is just starting out, he doesn't have a good understanding of the basic principles—depth of ▷

field, relationship between shutter speed and aperture, and exposure placement. A manual camera forces you to think about these things, especially in unusual lighting situations.

What type of camera should you use for outdoor photography?

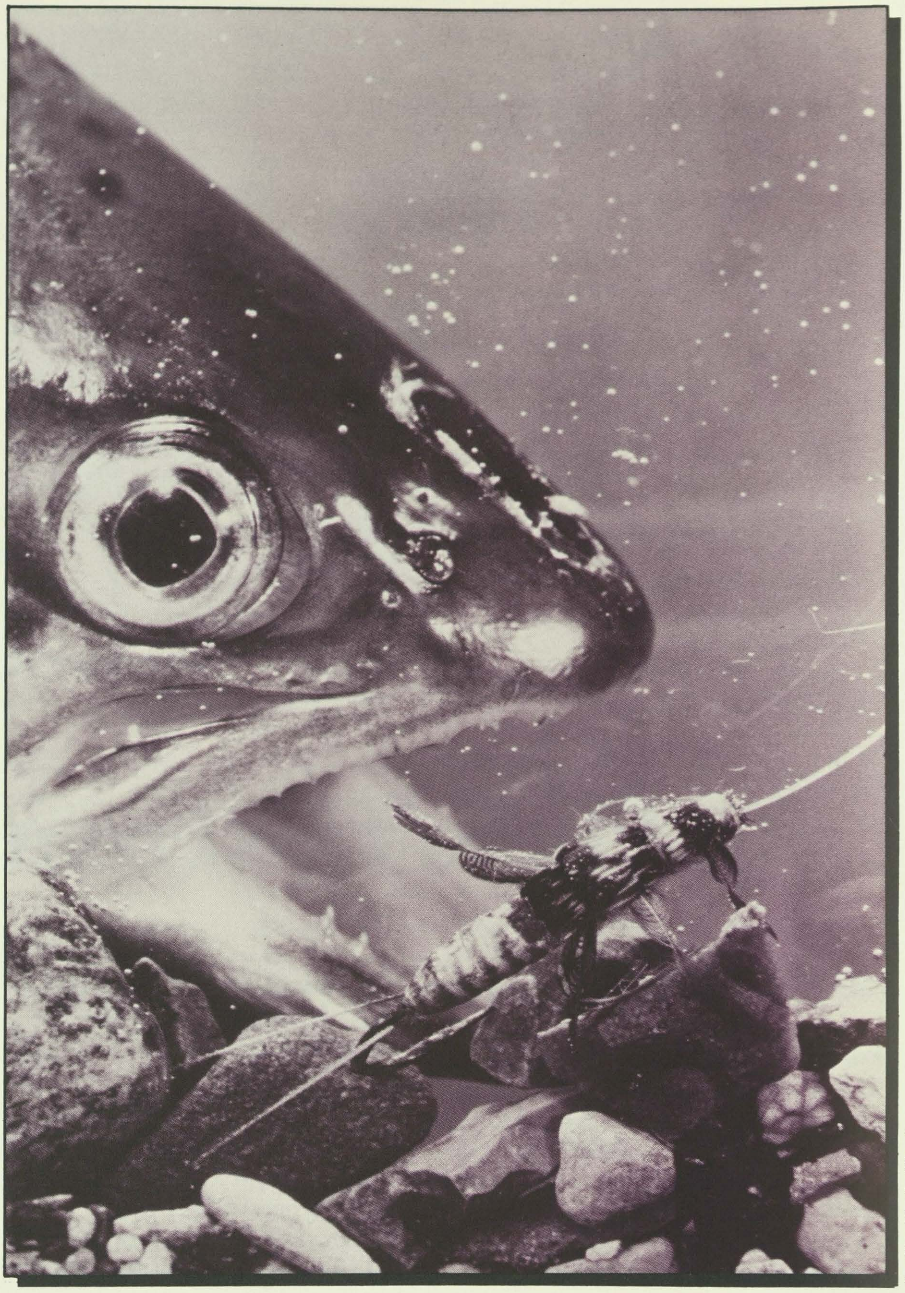
A single-lens reflex (SLR), especially for close-up photography, where you want to see the same area your film covers. The SLR is essential for telephoto pictures as well.

What lenses do you recommend?

When you buy a camera, you don't have to buy it with a "normal" lens. That is the one which usually comes with the camera. Instead, you can buy a macro or close-up lens. These will usually take normal pictures as well as close ups down to three inches from the subject. This lets you use one lens to photograph a scenic valley or a close up of a flower.

What are your thoughts about color slide film versus color negative film?

It depends on how your pictures will be used. Use color negative film if you want prints for a picture album or to give to friends, but for projecting pictures to large groups, you need slide film. Also, magazines and other publications require color slides or transparencies for color printing. Prints can be made from either film.



Lefty Kreh-Photo

If you want to sell photographs to magazines, is it necessary to have a large format camera, say a 2¼" x 2¼" or 4" x 5"?

Absolutely not! Today, many editors prefer Kodachrome 35mm color slides because of the sharpness and color rendition inherent in this modern film. For this reason, many photographers are selling more 35mm slides than ever before.

How important is the way film is processed in terms of image quality?

If you want top-drawer pictures, I recommend you have your film processed by professionals—not discount places or businesses that do it as a sideline. Custom processing is more expensive, but it doesn't make sense to spend a lot of money and time taking pictures, only to have the film ruined in processing because you were trying to save a few cents.

You take outdoor pictures under all kinds of conditions. Do you have any advice on how to protect lenses outdoors?

Yes. One way to protect your lenses is with a lens cap. One I use is spring loaded, and screws on like a filter. It can be opened when you want, and also serves as a lens shade which can be rotated to match the angle of the sun. The Butler Creek Company in Jackson, Wyoming developed them, and they're very durable and keep out dirt and water very well. I don't know of any other manufacturer which makes this specialized item.

Are there any best ways to safely carry camera equipment when in the field?

Yes. I carry all my equipment in aluminum cases. This helps keep them dry. They are good for traveling on airplanes too, because they hold up well in baggage compartments. I use a nylon camera bag when not around water because it's softer and easier to carry.

Also, I put my cameras and lenses in plastic freezer boxes in the nylon bag to separate them and protect them from shock. Small plastic bleach bottles (with the top ends cut off) also make good containers. I carry a few plastic garbage bags for protection from rain.

Leather bags are not very practical for the kind of photography I do. If they ever get wet, they are difficult to dry, and if you get salt water on them, the salt remains and can get into your equipment.

How do you protect your film from heat and moisture?

You should not open film until you're ready to use it. Never store film in glove compartments, trunks or any place that gets hot. Heat causes the most damage to film.

On the other hand, cold is a good way to preserve film. If you want, film can be frozen for a long time. I have film that's been frozen five or six years, and it's still good. When you carry a lot of film, on vacation for example, a small insulated cooler is good to carry it in.

What about converting tackle boxes to camera cases?

With the trays removed, tackle boxes can make very durable camera cases. You should, however, put a thick sheet of foam in the bottom. You can also cut out shapes in the foam to fit your different cameras and lenses. Ethafoam is made for this purpose, and works very well. You can buy it in camera stores. It's very important, though, to not use upholstery-type foam rubber for this purpose. It will chemically react with the finish on cameras and lenses and damage them.

Most people dread the thought of dropping a camera into the water. If it happens, is the camera completely ruined?

Not necessarily. If you can get it out right away, there's hope, if you act fast. First, get the camera home within a couple of hours and take the film out. Then take the lens off. Next, with the back open, let a hair dryer blow on it for about five minutes. Don't use it close enough to burn. You can also dry them in your oven (on the lowest temperature setting), with the door open, for 15 to 20 minutes.

What if you drop it in salt water?

Now that's a different story. Most repairmen suggest you buy a new camera because you can never get all the salt out. Eventually, it corrodes the delicate parts.

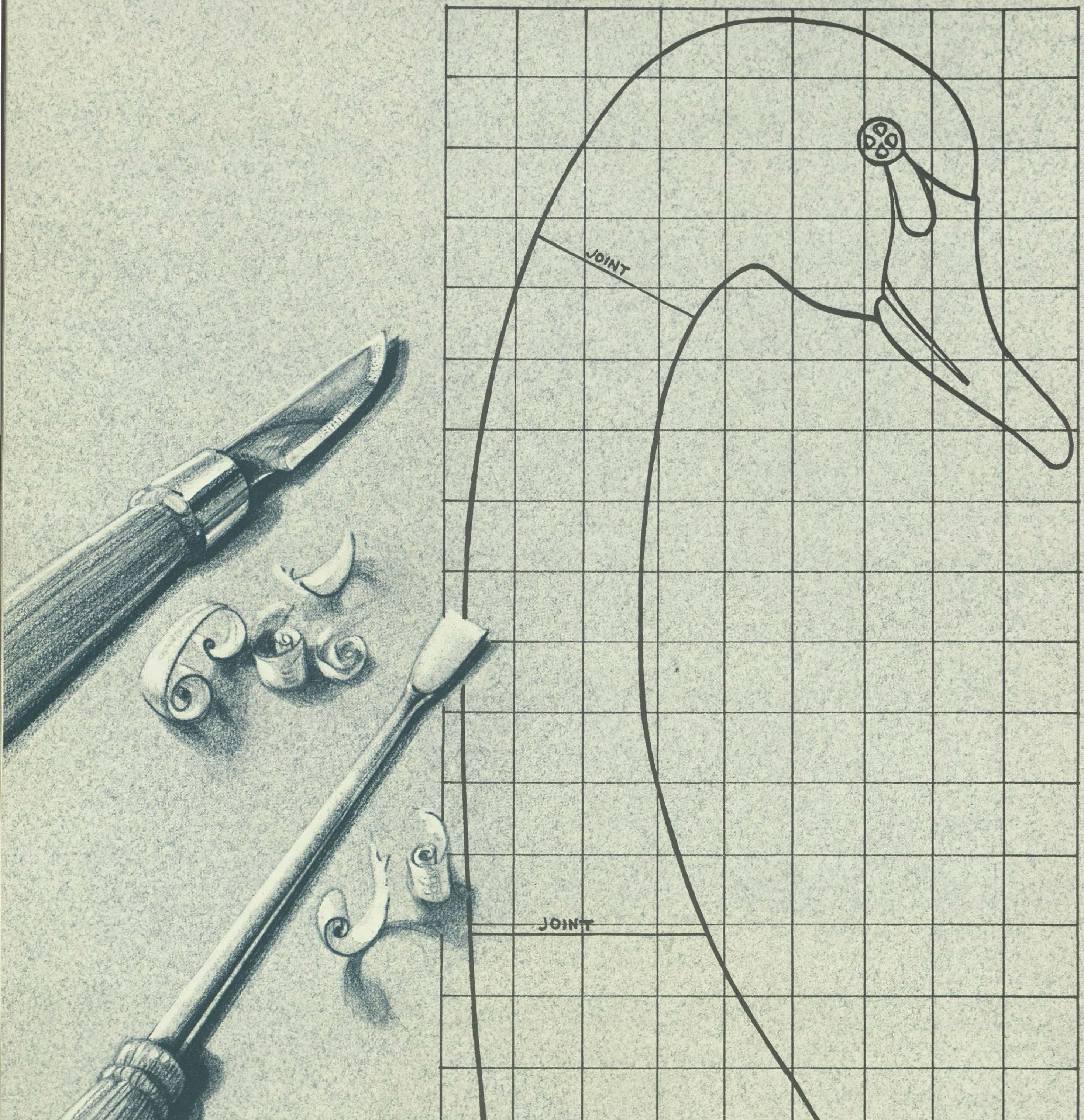
Lefty, do you have any suggestions for someone who can't get away to exotic places to take outdoor photographs?

Yes. Some of my best photographs were taken in my own back yard. The photograph of the trout taking a fly (shown on page 38) was taken on top of a card table in a friend's basement. I used two pieces of windowpane glass and an 18-inch section of ¾-inch plastic tubing, plus a few woodworking clamps. The tubing was greased with petroleum jelly and laid on one pane, like a horseshoe, then the second pane was laid on top and the two were clamped together.

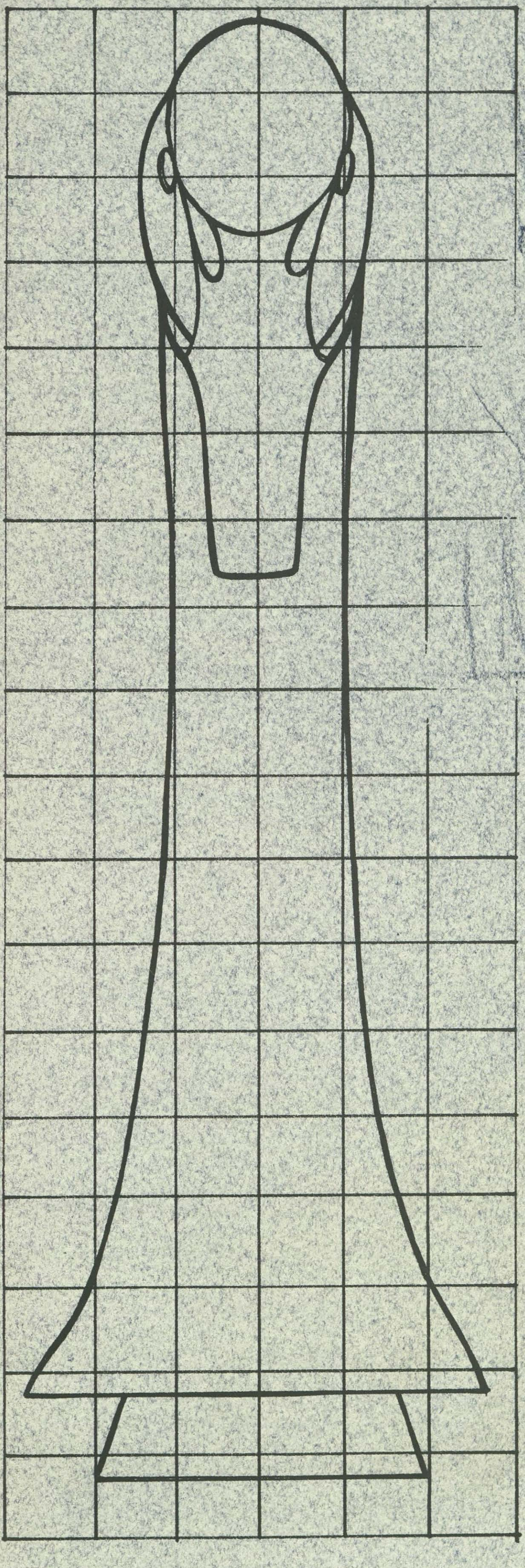
This formed an "aquarium" when placed in a vertical position. Small stones were placed inside, along with the fly, and it was filled with clear water. A green piece of cardboard was then placed behind, plus main and fill lights in front. A freshly caught trout was positioned with two coat hangers behind the glass. With a rear floodlight, I was able to take a picture that looked like it was taken underwater.

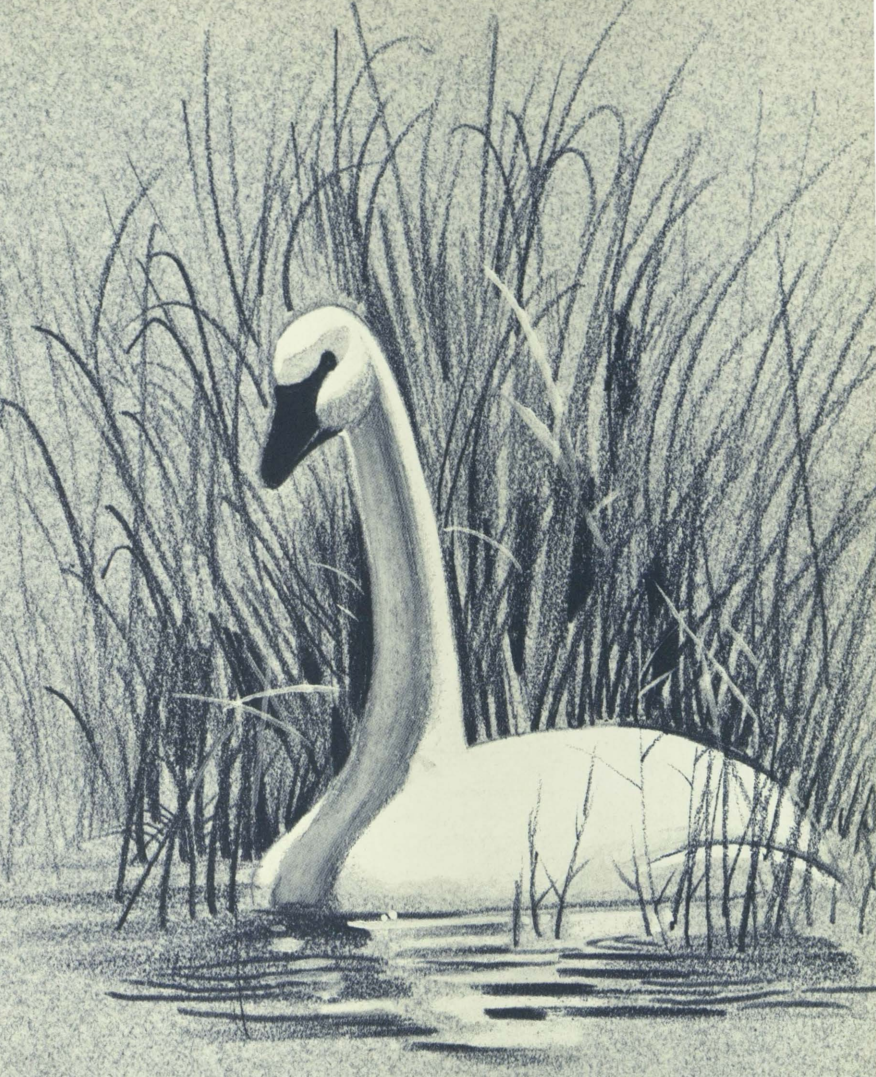
Do you have any final words for photographers who want to improve their photographs?

The best way I know is to take a lot of pictures. Try to learn from your mistakes. You can't learn if you aren't taking photographs. Keeping a notebook will help repeat successful techniques. □



THE STONY BROOK SWAN
by Charles E. Powell About 1936.

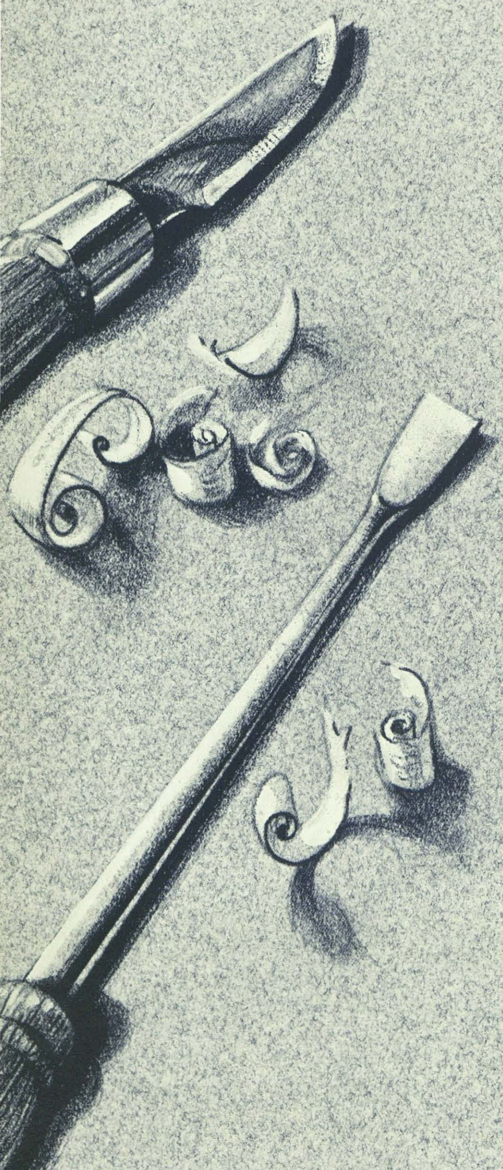




THE STONY BROOK SWAN

By Trisha Spillan

It begins with a thought; usually one that comes on a cold winter morning while huddled in a blind, waiting for the day's first flight of ducks to come into view. There is plenty of time to reflect then, with only the stillness and chill to keep you company. ▷



The thought begins to take form as the dawn widens. There ahead, scattered on the water are your decoys, which you hope will lure the birds within shotgun range. But the floating wooden ducks are lifeless; mass produced without the distinct coloration and hue of the real ducks.

After thinking these thoughts throughout the brief hunting season, it stands to reason that many duck hunters long at some time to create a decoy that truly will rival the real thing. For many avid duck hunters, this has been true down through the years, and these thoughts have formed the basis of the decoy carving craze which affects many a hunter.

Just as anglers spend off-seasons hand tying flies, or others hunt with a camera, decoy building is a natural extension of an enthusiast's sport; a way to occupy oneself during the off times.

Decoy building has evolved over the years to a refined art. To some collectors, early models are precious and savored. Plans for building them are handed down through generations, as are the actual decoys.

Veterinarian Keith Powell of Pembroke Pines inherited just such a plan; one for the "Stony Brook Swan," first carved by his grandfather, Charles Powell of Stony Brook, Long Island.

An architect by trade, Charles Powell made decoys mainly for his friends and family, but he considered his Stony Brook Swan "The" bird. He based his decoy design on a whistler swan that frequented the harbor near Long Island Sound, and completed the master wood carving venture in the mid-1930s.

Dr. Powell recalls that the blueprint for his grandfather's swan decoy, along with a watercolor drawing, was published in a 1934 book on decoys, as well as in the October-November 1980 issue of *The New York State Conservationist.* The cover of that magazine also featured the Stony Brook Swan.

Growing up among decoys, Dr. Powell said he never really appreciated the time and detail that went into each of them until he began following in his grandfather's tradition of decoy carving. He had inherited plans for the Stony Brook Swan, but only those of the head, neck and base.

With help, he was able to replicate the Stony Brook Swan. It now holds a place of honor in his family's home. After years of carving decoys, his collection has grown and also includes a wide variety of other birds. Recently, he has turned to canvas and camera to capture the beauty of wildlife in other artistic ways. □

Hunter Education News

By Lt. Byron Stalvey
Hunter Education Officer

Thousands of sportsmen eagerly look forward to the opening of hunting season. Off-season hours are spent selecting just the right types of equipment, sighting in a favorite rifle or perhaps patterning a shotgun.

Many pleasant hours can be spent making sure everything is in good working order, but some of us often forget the most important thing of all—our bodies. There's a big difference between working in an air-conditioned office during the hot summer and hiking through fields and woodlands in search of game during the cool fall and winter.

It's advantageous for hunters to get themselves in good physical condition before the season's opening day. If you're out of shape, you're apt to tire more quickly than if you are physically fit.

Do you know which two parts of your body get the most use during a day of hunting? If you guessed your heart and lungs, you're right. In an hour, your heart may pump the equivalent of 75 gallons of blood through its tens of thousands of veins, arteries and capillaries. Your lungs might process about 300 quarts of air in an hour of ordinary activity, inhaling and exhaling perhaps 12 to 20 times a minute. At higher levels of physical exertion, blood circulation and respiration rates increase greatly.

Why is this so important to hunters? Well, all parts of our bodies receive food and oxygen, as well as cleansing by circulation of blood through our heart and lungs. If these vital organs are unable to adequately clean and nourish our bodies because they're not in top condition, we may be unable to hunt either enjoyably or effectively.

Being overweight can also affect hunting performance. If a hunter is 25 pounds overweight, he or she is putting an extra strain on his or her heart and lungs. This much extra weight is somewhat like carrying a 25-pound rifle all day. Getting excess weight under control is one of the first and most important steps towards achieving a more physically fit body, and consequently a more enjoyable hunting season.

Before beginning a preseason exercise program, it is advisable for a sportsman to see his doctor for a checkup, especially if he has any doubt about his physical condition. Assuming you are healthy, however, one of the best exercises for strengthening your leg muscles and conditioning your heart and lungs is one everyone can do—walking.

Sportsmen should begin their exercise program slowly, walking only one-half mile a day for a week. The second week, you can walk a full mile and so, increasing your distance gradually until you build your endurance to the point you can walk four or five miles a day without resting. Stretching exercises are also important and should be done before you start your daily walk.

It's a good idea to wear your hunting boots and carry a four-foot length of 2x4 lumber while walking. This approximates field conditions for hunting. Carrying the 2x4 accustoms you to shifting the weight of your gun and, at the same time, helps strengthen your shoulder and arm muscles.

If you are a cardiac patient, you should have a complete physical examination before the season opens. Be sure to let your physician know the type of terrain you plan to hunt, and any other factors that could affect your heart.

There are a multitude of other exercise programs that anyone can follow to become physically fit. Your doctor is the best source of advice for these, but whatever you do, do it now so you'll be in shape for the coming season. You'll have a more enjoyable and healthy hunt. ☐

It's The Law

By Dave Swindell

What changes were made to the regulations for hunting and fishing for 1984-85?

Most regulation changes for this year were relatively minor or of a technical nature, and will not significantly affect the activities of sportsmen.

Some changes which will affect the public include the following:

1. As a result of changes to both Commission rules and to Florida law, the killing of any wild panther is a felony.

2. For falconers, the new open seasons for capturing falcons under permit are:

    For birds not yet capable of flight, March 17 through April 30, and June 1 through July 15.

    For year-old birds, September 15 through October 31, and December 1 through January 12.

3. In the Everglades Region, tracked vehicles used for any recreational purposes on public lands will be required to meet the same specifications required for such vehicles when used for hunting or fishing.

4. The possession of any breech-loading cartridge firearm is prohibited while engaged in muzzleloader gun hunting during a special muzzleloader hunting season.

5. All persons who bring into Florida trophies of cougar or black bear, which have been lawfully taken outside Florida, shall be required to have each item tagged to show the origin of the trophy, and the name, address and out-of-state hunting license number of the person who harvested the trophy.

6. Wild hogs found on the Apalachicola Wildlife and Environmental Area are now classified as game animals.

7. The possession of dogs on Type I wildlife management areas during closed seasons is prohibited, but non-hunting breeds may be possessed if kept under restraint.

8. The sale, purchase, or offer to purchase of any management area quota permit or antlerless deer permit is prohibited.

9. The prohibition against chasing any wildlife by the use of dogs during the spring turkey season was repealed.

10. Cast nets of any size may be used in the South Florida Region for taking nongame fish.

11. Properly tagged sunshine bass which have been produced in private hatcheries may be sold for food.

12. An open season for taking gopher tortoises was established for the period from July 1 through December 31. The use of traps or snares for taking gopher tortoises is prohibited. The painting of the shells of live turtles is forbidden except that temporary water-soluble markings may be used in turtle racing contests.

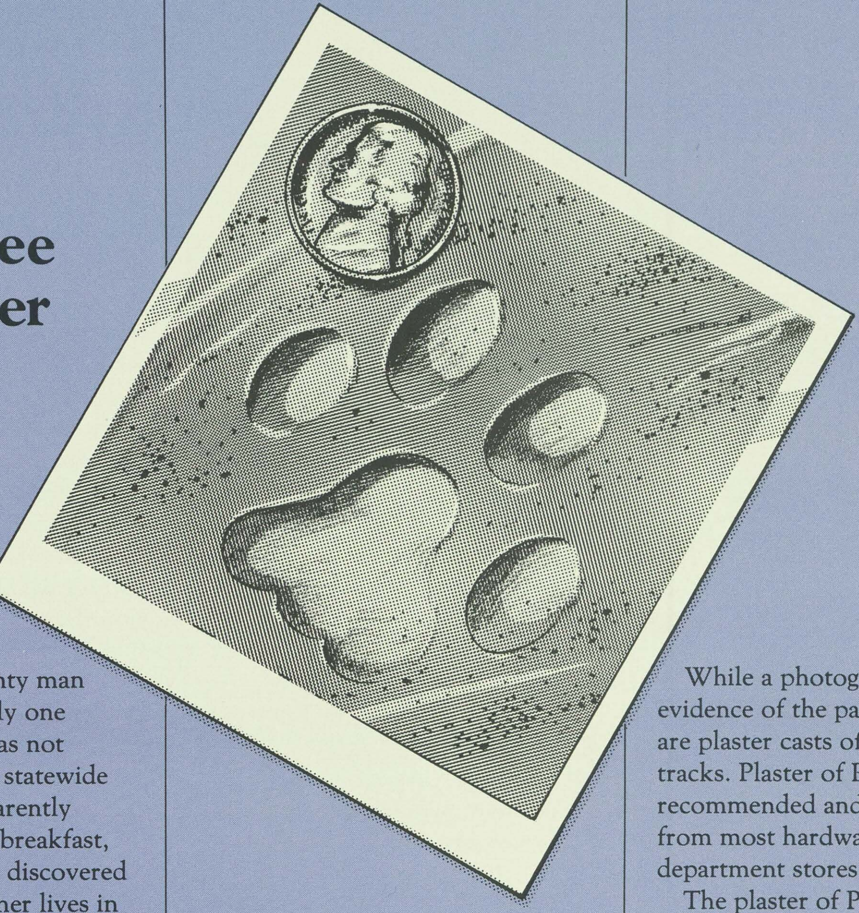
13. Individuals will be permitted to buy boxed alligator meat from authorized alligator farms or from permitted nuisance alligator trappers.

Copies of the 1984-85 hunting and fishing regulations are available from any Commission office and wherever hunting and fishing licenses are sold. ☐

Conservation Scene

Compiled by Trisha Spillan

If You See a Panther



When a Volusia County man went turkey hunting early one Saturday morning, he was not expecting a discovery of statewide significance. But by apparently interrupting a panther's breakfast, Bob Stevens unwittingly discovered the best evidence a panther lives in north Florida.

Stevens was hunting on the 25,000-acre Lighter Knot Hunting Club grounds when he came across a freshly killed white-tailed deer. The way in which the deer was killed and partially consumed was identical to methods used by panthers.

Wildlife officials called the find, "the best evidence that a panther survives outside of south Florida."

Part of the deer carcass was examined by Commission wildlife biologists. The neck of the deer had been broken and tooth punctures were evident in the hide. Several vital organs had been removed from the kill before Stevens discovered it.

He might not have found the food cache if the panther hadn't tipped him off. Stevens was walking out of the area on a fire road when he heard the panther scream. Ahead, it was obvious something had been dragged across the sandy road, so he followed the broken trail for about 20 yards off the road, where he discovered the carcass partially hidden under pine needles.

Stevens made plaster casts of animal tracks he found in nearby soft sand and mud and turned them over to the Commission. They were confirmed to be panther tracks.

With this evidence, the Commission is turning to Florida's outdoorsmen for help in gathering any additional information on panther signs. Because of the limited number of personnel and the large number of sightings that come to the Florida Panther Clearinghouse in Gainesville, the agency can only investigate those reports which include some physical evidence, such as animal tracks or plaster casts from tracks.

The more evidence gathered, and the sooner the sighting is reported, the better chance the agency has to document the report.

While a photograph is the best evidence of the panther, next best are plaster casts of the animal's tracks. Plaster of Paris is recommended and can be purchased from most hardware and department stores.

The plaster of Paris is mixed with water, following the directions on the container, and poured into the animal track, overlapping the track about one inch on all sides. The mixture should harden in 30 minutes and can then be removed.

While waiting for the plaster to harden, the individual should write down any additional information about the sighting or discovery. This includes time and date of the sighting, detailed description of the location and terrain, weather and sighting conditions and any other evidence present.

If plaster of Paris isn't available, a photograph can be taken. Include a standard-sized object like a coin next to the track.

Panther sightings should be reported to the Commission as soon as possible. The toll-free numbers for the Commission's offices are located on the inside front cover of most telephone directories and here on page 48. ☐

Galen Rathbun-Photo

If You See a Manatee

Curiosity got the better of these two beasts as Penny, the Labrador and Felicity, the manatee, met nose-to-nose.

The unlikely encounter occurred while Penny's owner, Galen Rathbun, was working along the Crystal River in Citrus County. ▷ Rathbun, project leader for the Manatee Research project, is a wildlife biologist with the U.S. Fish and Wildlife Service.

According to Rathbun, the pair eyed each other through the crystal clear water until Felicity rose towards the surface. As she came out of the river to breathe, Penny reached over and licked her nose. This one-on-one has occurred several times since that date.

Rathbun said there is good and bad news for the manatee this year. The bad news is that deaths since January 1984 have numbered 79, of which 21 were a result of boat/barge collisions. Natural causes, including the severe cold weather this past winter, took the lives of 22 others.

The good news is that by using a new radio tagging system, Rathbun and his staff have tagged 14 manatees and are now following them into salt water. Several have moved into the Suwannee River and one has moved to Tampa Bay.

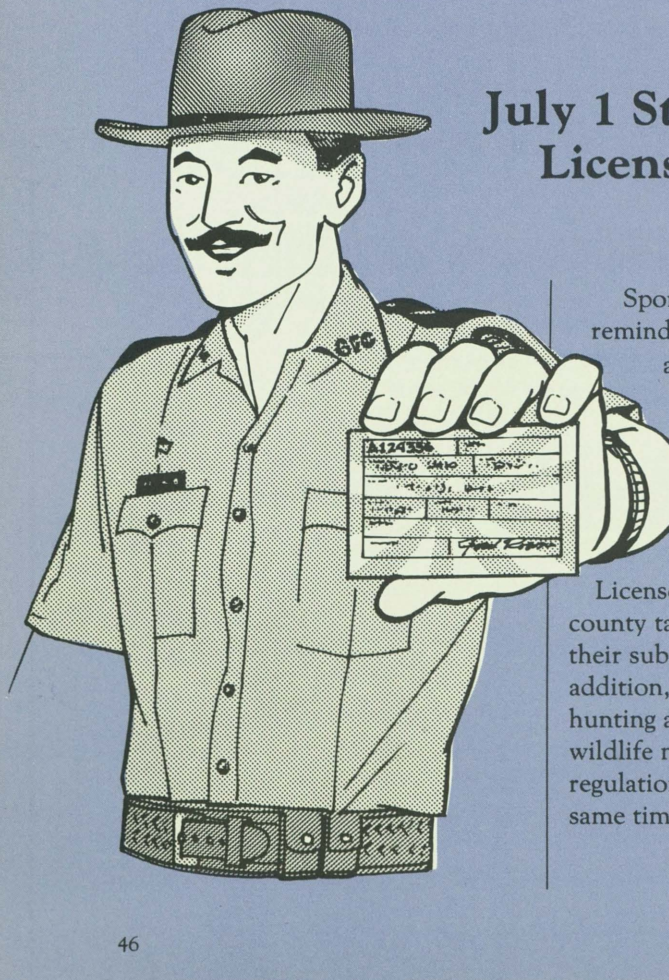
During July and August, your best chance of seeing a manatee is at Manatee Springs State Park, as most manatees are now scattered throughout their coastal range. It won't be until September that they return to Kings Bay.

You can help the U.S. Fish and Wildlife Service in its research project. Renee Priest, of the Save the Manatee Club, says good quality photographs of scarred manatees are needed.

The Service is able to identify many manatees by the scars on their backs from propellers. Since available funds do not allow the Service to photograph all the remaining animals, you can help if you have a good quality photograph. Send the photograph with any information on where and when the manatee was seen to:

Renee Priest, Save the Manatee Club, 1101 Audubon Way, Maitland, FL 32751.

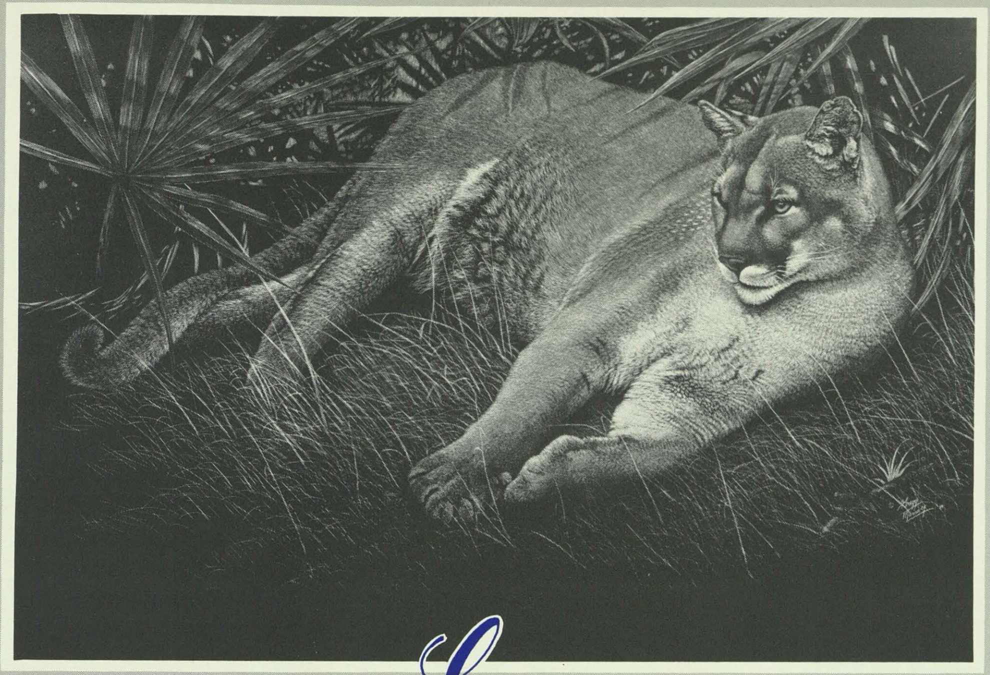
To date, the Service has been able to identify 600 individual manatees through such photographs. ☐



July 1 Starts New License Year

Sportsmen in Florida are reminded that 1984-85 hunting and fishing license must be renewed by July 1. Also, by the first week of July, hunters who applied early for quota hunt permits should know where they will be hunting.

Licenses have been on sale at all county tax collectors' offices and their subagents since June 1. In addition, copies of all 1984-85 hunting and fishing regulations and wildlife management area regulations can be obtained at the same time. ☐



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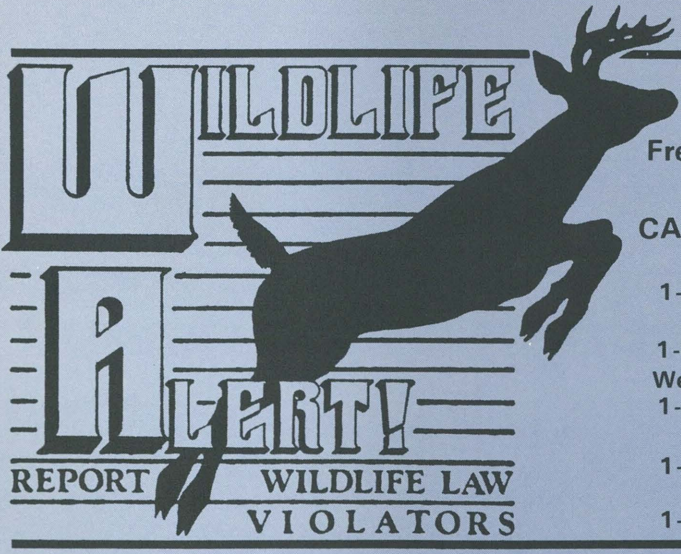

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This public document was promulgated at an annual cost of $40,805.85, or $1.38 per copy, to provide information regarding wildlife resources of Florida. Income from subscriptions defrays a substantial portion of the above-listed cost of magazine publication.

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Floridana

The United States Congress of 1924 authorized a public road between St. Augustine and Pensacola, the capitals of the territories of east and west Florida. The road between St. Augustine and the present area of Tallahassee was to follow as nearly as practical the old Spanish Mission Trail. Congress appropriated $20,000 for construction and authorized the use of troops stationed in Florida. Contracts were awarded to John Bellamy, a South Carolinian who had moved to Jefferson County, for sections extending from the St. Johns River (St. Augustine) to the Ochlockonee River (Tallahassee). The western half of the project finally was undertaken and completed by troops. Although the act of Congress authorizing the St. Augustine-Pensacola road stated a width of 25 feet, the specifications given in the advertisements by the territorial government for the eastern half required only 16 feet. Bellamy regarded his task as completed by May 19, 1826. Critics complained that the road was too narrow, that stumps had been left standing to a height that impeded the passage of wheeled vehicles, that the bridges were flimsy, and that the causeways over swampy areas were inadequate and unstable. Bellamy's defenders argued that the stumps did not bar the passage of carriages and wagons, and declared that it was impractical to cut a wide roadway, as the admission of too much sunlight and air would promote the growth of underbrush and scrub oak. The Bellamy Road was used until the beginning of the Civil War. Traces can be seen today. --Allen Morris